Table 5: Coverage of target/product combinations by the different contributions.
Note that some contributors did their calculations for $b^{6} \mathrm{O}$ and ${ }^{56} \mathrm{Fe}$ instead of assuming natural isotopic composition. In case of oxygen this does not cause any problems. For iron, however, there are some products which either can only be produced from from the heavier iron isotopes and other near-target products can be significantly produced from target nuclides not considered in the calculations. However, because of the low abundances of the neglected iron target isotopes no major discrepancies can be explained by this neglect. Except for those products which are marked as type , $i$ " for independent, all cross sections are cummulative. A „ $d$ " as reaction type indicates a direct production without a particular long-lived progenitor, e. ${ }^{3} \mathrm{H}$ without ${ }^{3} \mathrm{H}$ or ${ }^{22}$ Ne without ${ }^{22} \mathrm{Na}$.

| PLOT CODE <br> REACTION | $\begin{gathered} \hline \text { RE- } \\ \text { ACT- } \\ \text { ION } \\ \text { TYPE } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{B} \\ \mathbf{E} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { B } \\ & \mathbf{L} \\ & 1 \\ & 2 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{3} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & 2 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { B } \\ & \text { L } \\ & 2 \\ & 3 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{2} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{3} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{C} \\ & \mathrm{S} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{L} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{O} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{R} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{R} \\ \mathbf{1} \\ \mathbf{2} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{G} \\ \mathbf{L} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{G} \\ & \mathbf{L} \\ & 1 \\ & 2 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{I} \\ & \mathbf{S} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{K} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{K} \\ & \mathbf{O} \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{L} \\ & \mathbf{A} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ \mathbf{2} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{2} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{3} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{S} \\ & \mathbf{O} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{T} \\ & \mathbf{A} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | Y <br> $\mathbf{O}$ <br> $\mathbf{1}$ <br> $\mathbf{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| O-0(p, 8 pXn ) $\mathrm{H}-2$ | i |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |
| O-0(p,8pXn)H-3 | i |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |
| O-0(p,7pXn)HE-3 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |
| O-0(p,7pXn)HE-4 | i |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |
| O-0(p,5pXn)BE-7 | 1 |  | X | X |  |  |  |  |  | X | X |  |  |  |  | X |  | X |  |  | X | X | X | X |  |  |  | X | X | X |
| O-0(p,5pXn)BE-10 | i |  | X | X |  |  |  |  |  | X | X |  |  |  |  | X |  | X |  |  | X | X | X | X |  |  |  | X | X | X |
| O-0(p,3p3n)C-11 | i |  | X | X |  |  |  |  |  | X | X |  |  |  |  | X |  | X |  |  | X | X | X | X |  |  |  | X | X | X |
| O-0(p,3pXn)C-14 |  |  | X | X |  |  |  |  |  | X | X |  |  |  |  | X |  | X |  |  | X | X | X | X |  |  |  | X | X | X |
| AL-27(p,13pXn)H-2 | i |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |
| AL-27(p,13pXn)H-3 | i |  |  |  |  |  |  | X |  |  | X | X | X |  |  |  |  | X | X |  | X | X | X |  |  |  |  | X | X | X |
| AL-27(p,12pXn)HE-3 | i |  |  |  |  |  |  | X |  |  | X | X | X |  |  |  |  | X | X |  | X | X | X |  |  |  |  | X | X | X |
| AL-27(p,12pXn)HE-4 | i |  |  |  |  |  |  | X |  |  | X | X | X |  |  |  |  | X | X |  | X | X | X |  |  |  |  |  | X | X |
| AL-27(p,10p11n)BE-7 | i |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AL-27(p,10p8n)BE-10 | i |  |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AL-27(p,5pXn)F-18 |  |  | X |  |  |  |  |  |  |  | X |  | X | X | X | X | X |  |  |  |  | X | X | X |  |  |  |  |  | X |
| AL-27(p,4pXn)NE-20 |  |  | X |  |  |  |  |  |  |  | X |  | X | X | X | X | X |  |  |  |  | X | X | X |  |  |  |  |  | X |
| AL-27(p,4pXn)NE-21 |  |  | X |  |  |  |  |  |  |  | X |  | X | X | X | X | X |  |  |  |  | X | X | X |  |  |  |  |  | X |
| AL-27(p,4pXn)NE-22 | d |  | X |  |  |  |  |  |  |  | X |  | X | X | X | X | X |  |  |  |  | X | X | X |  |  |  | X |  | X |
| AL-27(p,3p3n)NA-22 |  |  | X |  |  |  |  | X |  |  | X | X | X | X | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X |
| AL-27(p,3pn)NA-24 |  |  | X |  |  |  |  | X |  |  | X | X | X | X | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X |
| AL-27(p,pn)AL-26 | i |  | X |  |  |  |  | X |  |  | X |  |  | X | X | X | X |  |  |  | X | X | X | X | X | X | X | X | X | X |
| FE-0(p,26pXn)H-2 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  | X |
| FE-0(p,26pXn)H-3 | i |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X |  |  | X |  | X | X | X | X |
| FE-0(p,25pXn)HE-3 | i |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X |  |  | X |  | X | X | X | X |
| FE-0(p,25pXn)HE-4 | i |  |  |  |  |  |  |  | X |  | X | X |  |  |  |  |  | X | X |  | X | X |  |  | X |  | X | X | X | X |
| FE-0(p,23pXn)BE-7 | i |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X | X | X |  | X | X | X |
| FE-0(p,23pXn)BE-10 | 1 |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| FE-0(p,17pXn)NE-20 |  |  |  |  |  |  |  |  |  |  | X | X | X | X |  |  |  | X | X |  | X | X |  | X |  | X | X | X | X | X |
| FE-0(p,17pXn)NE-21 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X |  | X |  | X | X | X | X | X |
| FE-0(p,17pXn)NE-22 | d |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X |  | X |  | X | X | X | X | X |
| FE-0(p,16pXn)NA-22 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| FE-0(p,16pXn)NA-24 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |


| PLOT CODE <br> REACTION | $\begin{gathered} \text { RE- } \\ \text { ACT- } \\ \text { ION } \\ \text { TYPE } \end{gathered}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{E} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{3} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & 2 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{2} \\ & \mathbf{3} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ 1 \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{2} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{3} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{C} \\ & \mathrm{S} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{L} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{O} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{R} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{F} \\ & \mathbf{R} \\ & 1 \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{G} \\ & \mathbf{L} \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{G} \\ & \mathbf{L} \\ & 1 \\ & 2 \\ & \hline \end{aligned}$ | I <br> S <br> $\mathbf{1}$ <br> $\mathbf{1}$ | $\begin{aligned} & \hline \mathbf{K} \\ & \mathbf{A} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{K} \\ & \mathbf{O} \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | L <br>  <br> 1 <br> 1 <br> 1 | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ 2 \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | S <br> $\mathbf{H}$ <br> $\mathbf{2}$ <br> $\mathbf{1}$ | $\mathbf{S}$ <br> $\mathbf{H}$ <br> $\mathbf{3}$ <br> $\mathbf{1}$ | S <br> O <br> $\mathbf{1}$ <br> $\mathbf{1}$ | T <br> A <br> 1 <br> 1 | Y <br> $\mathbf{O}$ <br> $\mathbf{1}$ <br> $\mathbf{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FE-0(p,15pXn)MG-28 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X |  | X |  | X | X | X | X | X |
| FE-0(p,14pXn)AL-26 |  |  |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| FE-0(p,10pXn)CL-36 | i |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X | X | X | X | X | X |  | X | X | X | X | X |
| FE-0(p,9pXn)AR-36 | d |  | X |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X | X | X | X | X | X |  | X | X | X | X | X |
| FE-0(p,9pXn)AR-38 |  |  | X |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X | X | X | X | X | X |  | X | X | X | X | X |
| FE-0(p, 8pXn)K-42 | i |  | X |  |  |  |  |  |  |  | X |  | X | X | X |  |  |  |  | X |  | X | X | X |  |  |  |  |  | X |
| FE-0(p,8pXn)K-43 |  |  | X |  |  |  |  |  |  |  | X |  | X | X | X |  |  |  |  | X |  | X | X | X |  |  |  |  |  | X |
| FE-0(p,6pXn)SC-46 | i |  | X |  |  |  |  |  | X |  | X | X | X | X | X | X | X | X | X | X | X | X |  | X |  | X | X | X | X | X |
| FE-0(p,6pXn)SC-47 |  |  | X |  |  |  |  |  | X |  | X |  | X | X | X | X | X |  |  | X |  | X |  | X |  |  |  |  |  | X |
| FE-0(p,6pXn)SC-48 |  |  | X |  |  |  |  |  |  |  | X |  | X | X | X | X | X |  |  | X |  | X |  | X |  |  |  |  |  | X |
| FE-0(p,5pXn)TI-44 |  |  | X |  |  |  |  |  |  |  |  |  | X |  | X | X | X |  |  | X |  | X | X | X |  |  |  |  |  | X |
| FE-0(p,4pXn)V-48 |  |  | X |  |  |  |  |  | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| FE-0(p,3pXn)CR-48 |  |  | X |  |  |  |  |  |  |  | X | X | X |  | X | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X |
| FE-0(p,3pXn)CR-51 |  |  | X |  |  |  |  |  | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| FE-0(p,2pXn)MN-52 |  | X | X |  |  |  |  |  | X |  | X | X | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X |
| FE-0(p,2pXn)MN-54 | i | X | X |  |  |  |  |  | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| FE-0(p,pXn)FE-52 |  | X | X |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X |  | X |  | X | X | X | X | X | X | X |
| FE-0(p,pXn)FE-55 |  | X | X |  |  |  |  |  | X |  | X | X | X | X | X | X | X | X | X | X | X | X |  | X | X | X | X | X | X | X |
| FE-0(p,Xn)CO-55 | i | X | X |  |  |  |  |  | X |  | X | X |  | X | X | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X |
| FE-0(p,Xn)CO-56 | 1 | X | X |  |  |  |  |  | X |  | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| FE-0(p,Xn)CO-57 | i |  | X |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  | X |  | X | X |  |  |  |  |  |  | X |
| FE-0(p,Xn)CO-58 | i |  | X |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  | X | X |  |  |  |  |  |  | X |
| CO-59(p,p3n)CO-56 |  | X | X |  | X |  | X |  |  |  | X | X | X |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| CO-59(p,p2n)CO-57 |  | X | X |  | X |  | X |  |  |  | X | X |  |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| CO-59(p,pn)CO-58 | i | X | X |  | X |  | X |  |  |  | X | X |  |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| CO-59(p,4n)NI-56 | i | X | X |  | X |  | X |  |  |  | X | X |  |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| CO-59(p,3n)NI-57 | 1 | X | X |  | X |  | X |  |  |  | X | X |  |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,40pXn)H-2 | i |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  | X |
| ZR-0(p,40pXn)H-3 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  | X |
| ZR-0(p,39pXn)HE-3 | i |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  | X |
| ZR-0(p,39pXn)HE-4 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  | X |
| ZR-0(p,37pXn)BE-7 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | X | X | X | X | X | X |  | X | X | X |
| ZR-0(p,30pXn)NA-22 | i |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| ZR-0(p,30pXn)NA-24 |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| ZR-0(p,20pXn)SC-46 | i |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| ZR-0(p,20pXn)SC-47 |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| ZR-0(p,18pXn)V-48 |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,17pXn)CR-51 |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,16pXn)MN-52 |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| ZR-0(p,16pXn)MN-54 | 1 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,15pXn)FE-59 |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| ZR-0(p,14pXn)CO-56 |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |


| PLOT CODE <br> REACTION | $\begin{gathered} \text { RE- } \\ \text { ACT- } \\ \text { ION } \\ \text { TYPE } \end{gathered}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{E} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{3} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & 2 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{2} \\ & \mathbf{3} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{2} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ 1 \\ \mathbf{3} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{C} \\ & \mathrm{S} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{L} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{O} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{R} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{F} \\ & \mathbf{R} \\ & \mathbf{1} \\ & \mathbf{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{G} \\ & \mathbf{L} \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\mathbf{G}$ <br> $\mathbf{L}$ <br> $\mathbf{1}$ <br> $\mathbf{2}$ | $\begin{aligned} & \hline \mathbf{I} \\ & \mathbf{S} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{K} \\ & \mathbf{A} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{K} \\ & \mathbf{O} \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{L} \\ & \mathbf{A} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ 2 \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | S <br> H <br> $\mathbf{2}$ <br> $\mathbf{1}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{3} \\ \mathbf{1} \\ \hline \end{gathered}$ | S <br> 0 <br> 1 <br> 1 | T <br> A <br> $\mathbf{1}$ <br> $\mathbf{1}$ | Y <br> $\mathbf{O}$ <br> $\mathbf{1}$ <br> $\mathbf{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ZR-0(p,14pXn)CO-57 |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| ZR-0(p,14pXn)CO-58 | i |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,14pXn)CO-60 | i |  |  |  |  |  |  |  |  |  |  | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,13pXn)NI-57 |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| ZR-0(p,11pXn)ZN-65 |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,10pXn)GA-67 |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,9pXn)GE-68 |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| ZR-0(p,9pXn)GE-69 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  |  | X | X | X | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,8pXn)AS-71 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,8pXn)AS-73 |  |  | X |  |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  | X |  | X |  | X |  |  |  |  |  | X |
| ZR-0(p,8pXn)AS-74 | i |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,7pXn)SE-72 |  |  | X |  |  |  |  |  |  |  |  |  | X |  | X |  |  |  |  | X |  | X | X | X |  |  |  |  |  | X |
| ZR-0(p,7pXn)SE-75 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,6pXn)BR-76 |  |  | X |  |  |  |  |  |  |  |  |  | X | X | X |  | X |  |  | X |  | X | X | X |  |  |  |  |  | X |
| ZR-0(p,6pXn)BR-77 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,5pXn)KR-78 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,5pXn)KR-79 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,5pXn)KR-80 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,5pXn)KR-81 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,5pXn)KR-82 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,5pXn)KR-83 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,5pXn)KR-84 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,5pXn)KR-85 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,5pXn)KR-86 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X |  | X | X | X | X | X |
| ZR-0(p,4pXn)RB-83 | i |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,4pXn)RB-84 | i |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,4pXn)RB-86 | 1 |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,3pXn)SR-82 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,3pXn)SR-83 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,3pXn)SR-85 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,2pXn)Y-86 | i |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,2pXn)Y-87 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,2pXn)Y-88 | i |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,pXn)ZR-86 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,pXn)ZR-88 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,pXn)ZR-89 |  | X | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,pXn)ZR-95 | 1 |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  | X | X | X | X | X | X | X | X |  |  |  | X | X | X |
| ZR-0(p,Xn)NB-90 | i | X | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ZR-0(p,Xn)NB-95 | 1 | X | X |  |  |  |  |  |  |  |  | X |  |  |  |  | X | X | X | X | X | X | X | X | X |  |  | X | X | X |
| ZR-0(p,n)NB-96 | i | X | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  | X | X | X | X | X | X | X |  |  |  | X | X | X |
| AU-197(p,79pXXn)H-2 | i |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |
| AU-197(p,79pXXn)H-3 | i |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |


| PLOT CODE <br> REACTION | $\begin{gathered} \text { RE- } \\ \text { ACT- } \\ \text { ION } \\ \text { TYPE } \end{gathered}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{E} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{3} \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{2} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{2} \\ & \mathbf{3} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{2} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{3} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathrm{C} \\ \mathrm{~S} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{L} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathrm{F} \\ \mathbf{O} \\ 1 \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{R} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{R} \\ \mathbf{1} \\ \mathbf{2} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{G} \\ \mathbf{L} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | $\begin{aligned} & \hline \mathbf{G} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{I} \\ & \mathbf{S} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{K} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{K} \\ & \mathbf{O} \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{L} \\ & \mathbf{A} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \mathbf{M} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ \mathbf{2} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{2} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{3} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{O} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | T <br> A <br> $\mathbf{1}$ <br> $\mathbf{1}$ | Y <br> $\mathbf{O}$ <br> $\mathbf{1}$ <br> $\mathbf{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AU-197(p,78pXXn)HE-3 | i |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |
| AU-197(p,78pXXn)HE-4 | i |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |
| AU-197(p,76pXXn)BE-7 | i |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X |  |  | X |  | X | X | X |  |  | X | X |  |
| AU-197(p,69pXXn)NA-22 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X |  | X | X |  |  |  | X | X | X |
| AU-197(p,69pXXn)NA-24 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X |  | X | X |  | X |  | X | X | X |
| AU-197(p,59p93n)SC-46 | i |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,55p89n)MN-54 | 1 |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,54p85n)FE-59 |  |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,53p87n)CO-58 | i |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,53p85n)CO-60 | i |  |  |  |  |  |  |  |  |  | X | X |  | X |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,50p83n)ZN-65 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,47p77n)AS-74 | 1 |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,46p77n)SE-75 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,45p71n)BR-82 |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| AU-197(p,43p72n)RB-83 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,43p71n)RB-84 | 1 |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,43p69n)RB-86 | 1 |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,42p71n)SR-85 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,41p70n)Y-87 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,41p69n)Y-88 | i |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,40p70n)ZR-88 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,40p69n)ZR-89 |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,40p63n)ZR-95 |  |  |  |  |  |  |  |  |  |  |  | X |  | X | X |  |  | X | X |  | X |  | X | X |  | X |  | X | X | X |
| AU-197(p,39p64n)NB-95 | i |  |  |  |  |  |  |  |  |  |  | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,37p65n)TC-96 | 1 |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,36p59n)RU-103 |  |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,35p61n)RH-102 | i |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,33p60n)AG-105 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,30p55n)SN-113 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,28p49n)TE-121 |  |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,26p45n)XE-127 |  |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,24p43n)BA-131 |  |  |  |  |  |  |  |  |  |  | X | X |  |  | X |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,24p41n)BA-133 |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| AU-197(p,22p37n)CE-139 |  |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,19p36n)PM-143 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| AU-197(p,17p36n)EU-145 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,17p34n)EU-147 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,17p33n)EU-148 | i |  |  |  |  |  |  |  |  |  | X | X |  |  | X |  |  | X | X |  | X | X | X | X |  | X |  | X | X | X |
| AU-197(p,17p32n)EU-149 |  |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,16p36n)GD-146 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,16p35n)GD-147 |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,16p33n)GD-149 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |


| PLOT CODE <br> REACTION | $\begin{gathered} \text { RE- } \\ \text { ACT- } \\ \text { ION } \\ \text { TYPE } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{E} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{3} \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{2} \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & 2 \\ & 3 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{2} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{3} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{C} \\ & \mathbf{S} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{F} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline F \\ \mathbf{O} \\ 1 \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{R} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{R} \\ \mathbf{1} \\ \mathbf{2} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{G} \\ \mathbf{L} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | $\begin{aligned} & \hline \mathbf{G} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{I} \\ & \mathbf{S} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{K} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{K} \\ \mathbf{O} \\ 1 \\ 1 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{L} \\ & \mathbf{A} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ \mathbf{2} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{2} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{3} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{O} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{T} \\ & \mathbf{A} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \hline \end{aligned}$ | Y <br> $\mathbf{O}$ <br> 1 <br> 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AU-197(p,16p31n)GD-151 |  |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,16p29n)GD-153 |  |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,15p34n)TB-149 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  | X | X |  | X | X | X |  |  | X | X | X | X | X |
| AU-197(p,15p32n)TB-151 |  |  |  |  |  |  |  |  |  |  | X | X |  | X |  |  |  | X | X |  | X | X | X |  |  | X | X | X | X | X |
| AU-197(p,15p30n)TB-153 |  |  |  |  |  |  |  |  |  |  |  | X |  | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,15p28n)TB-155 |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  | X |  |  |  | X | X | X |  |  |  |  |  | X |
| AU-197(p,12p26n)ER-160 |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| AU-197(p,11p22n)TM-165 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,11p20n)TM-167 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,11p19n)TM-168 | 1 |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  | X |  |  | X | X | X | X |  | X |  |  | X | X |
| AU-197(p,10p22n)YB-166 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,10p19n)YB-169 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,9p20n)LU-169 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,9p19n)LU-170 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X | X |  |  | X | X | X | X | X |
| AU-197(p,9p18n)LU-171 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,9p16n)LU-173 |  |  | X |  |  |  |  |  |  |  | X | X | X | X | X |  |  | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,8p18n)HF-172 |  |  | X |  |  |  |  |  |  |  | X | X | X | X | X |  | X | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,8p17n)HF-173 |  |  | X |  |  |  |  |  |  |  | X | X | X | X | X |  | X | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,8p15n)HF-175 |  |  | X |  |  |  |  |  |  |  | X | X | X | X | X |  | X | X | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,7p9n)TA-182 |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |  | X |  |  |  |  |  | X |
| AU-197(p,6p14n)W-178 |  |  | X |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X | X | X |  |  |  |  |  | X |
| AU-197(p,5p12n)RE-181 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  | X |  | X |  | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,5p11n)RE-182 |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X |  |  | X | X | X | X | X | X |  |  | X | X | X | X | X |
| AU-197(p,5p10n)RE-183 |  |  | X |  |  | X |  |  |  |  | X | X | X | X | X |  | X | X | X | X | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,4p12n)OS-182 |  |  | X |  |  | X |  |  |  |  | X | X | X | X | X |  | X | X | X | X | X | X | X | X |  | X | X | X | X | X |
| AU-197(p,4p9n)OS-185 |  |  | X |  |  | X |  |  |  |  | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,4p3n)OS-191 |  |  |  |  |  | X |  |  |  |  | X | X |  | X | X |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,3p10n)IR-185 |  |  | X |  |  | X |  |  |  |  | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,3p9n)IR-186 |  |  | X |  |  | X |  |  |  |  | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,3p8n)IR-187 |  |  | X |  |  | X |  |  |  |  | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,3p7n)IR-188 | i |  | X |  |  | X |  |  |  |  | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,3p6n)IR-189 | 1 |  | X |  |  | X |  |  |  |  | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,3p5n)IR-190 | 1 |  | X |  |  | X |  |  |  |  | X | X |  | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,3p3n)IR-192 | i |  | X |  |  | X |  |  |  |  | X | X |  | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,2p8n)PT-188 |  |  | X |  |  | X |  |  |  |  | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,2p7n)PT-189 |  |  | X |  |  | X |  |  |  |  |  | X | X | X | X |  | X | X | X | X |  | X | X | X | X | X | X | X | X | X |
| AU-197(p,2p5n)PT-191 |  |  | X |  |  | X |  |  |  |  | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,p4n)AU-193 |  | X | X |  |  | X |  |  |  |  | X | X |  | X | X |  |  | X | X | X | X | X | X |  | X | X | X | X | X | X |
| AU-197(p,p3n)AU-194 | i | X | X |  |  | X |  |  |  |  | X | X |  | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,p2n)AU-195 |  | X | X |  |  | X |  |  |  |  | X | X |  | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,pn)AU-196 | i | X | X |  |  | X |  |  |  |  | X | X |  | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,5n)HG-193 | i | X | X |  |  | X |  |  |  |  | X | X | X | X | X |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X |


| PLOT CODE | $\begin{gathered} \text { RE- } \\ \text { ACT- } \\ \text { ION } \\ \text { TYPE } \end{gathered}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{E} \\ & \mathbf{1} \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{1} \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{2} \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{1} \\ & \mathbf{3} \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & \mathbf{2} \\ & \mathbf{1} \end{aligned}$ | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{L} \\ & 2 \\ & 3 \end{aligned}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{2} \end{gathered}$ | $\begin{gathered} \hline \mathbf{C} \\ \mathbf{M} \\ \mathbf{1} \\ \mathbf{3} \end{gathered}$ | $\begin{aligned} & \hline \mathbf{C} \\ & \mathbf{S} \\ & \mathbf{1} \end{aligned}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{L} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{O} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{R} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \mathbf{R} \\ \mathbf{1} \\ \mathbf{2} \end{gathered}$ | $\begin{gathered} \hline \mathbf{G} \\ \mathbf{L} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{G} \\ \mathbf{L} \\ \mathbf{1} \\ \mathbf{2} \end{gathered}$ | $\begin{aligned} & \hline \mathbf{I} \\ & \mathbf{S} \\ & \mathbf{1} \\ & \mathbf{1} \end{aligned}$ | $\begin{gathered} \hline \mathbf{K} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{K} \\ \mathbf{O} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{L} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{A} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{M} \\ \mathbf{I} \\ \mathbf{2} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{1} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{2} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{H} \\ \mathbf{3} \\ \mathbf{1} \end{gathered}$ | $\begin{gathered} \hline \mathbf{S} \\ \mathbf{O} \\ \mathbf{1} \\ \mathbf{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathbf{T} \\ & \mathbf{A} \\ & \mathbf{1} \\ & \mathbf{1} \end{aligned}$ | Y <br> $\mathbf{O}$ <br> $\mathbf{1}$ <br> 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AU-197(p,4n)HG-194 | i | X | X |  |  | X |  |  |  |  | X | X |  | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,3n)HG-195 | 1 | X | X |  |  | X |  |  |  |  | X | X |  | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| AU-197(p,n)HG-197 | 1 | X | X |  |  | X |  |  |  |  | X | X |  | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

