

## <sup>85</sup>Mo

The discovery of <sup>85</sup>Mo is credited to Yennello et al. with their 1992 paper “New Nuclei Near the Proton-Drip Line Around Z = 40” ([1992Ye04](#)). At the National Superconducting Cyclotron Laboratory at Michigan State University, a 70 MeV/A <sup>92</sup>Mo beam was produced by the K1200 cyclotron and impinged on a <sup>58</sup>Ni target. <sup>85</sup>Mo was identified with the A1200 fragment separator by measuring the time-of-flight and energy loss of the fragments. “The mass spectra for residues with Z from 39 to 44 are shown in [the figure] with the new isotopes marked by arrows. Although both <sup>84</sup>Mo and <sup>86</sup>Mo have been previously observed, no reference to the identification of <sup>85</sup>Mo was found. The other new isotopes observed in this study are <sup>78</sup>Y, <sup>82</sup>Nb, <sup>86</sup>Tc, and <sup>89,90</sup>Ru.”

Adapted from reference ([2012Pa21](#))

[1992Ye04](#) S. J. Yennello, J. A. Winger, T. Antaya, W. Benenson *et al.*, Phys. Rev. C **46**, 2620 (1992).

[2012Pa21](#) A. M. Parker and M. Thoennessen, At. Data Nucl. Data Tables **98**, 812 (2012).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”