

## <sup>107</sup>Ru

Glendenin described the first observation of <sup>107</sup>Ru in “Short-Lived Ruthenium-Rhodium Decay Chains,” which was published in 1951 as a part of the Plutonium Project Series ([1950G106](#)). Uranyl nitrate was irradiated with neutrons from the Clinton pile in Oak Ridge and <sup>107</sup>Ru was identified by measuring its activity following chemical separation. “The available mass numbers for the 4m Ru – 24m Rh chain are thus limited to 107, 108, and 110 or greater... On the basis of energy a mass assignment of 107 is highly probable.” The 4m Ru – 24m Rh decay chain had been reported earlier without a mass assignment ([1943Bo03](#)).

Adapted from reference ([2012Ny02](#))

- [1943Bo03](#) H. J. Born and W. Seelmann-Eggebert, *Naturwissenschaften* **31**, 420 (1943).  
[1950G106](#) L. E. Glendenin, *Nat. Nucl. Ener. Ser.* **9**, paper115 p. 849 (1950).  
[2012Ny02](#) A. Nystrom and M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 95 (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)”