

¹⁵¹Pm

¹⁵¹Pm was identified in 1952 by Rutledge et al. and published in “Gamma-rays associated with selected neutron-induced radioactivities” (1952Ru10). Enriched Nd¹⁵⁰ was bombarded with neutrons in the Argonne heavy water moderated reactor. ¹⁵¹Pm was identified with help of a photographic magnetic spectrometer. “A newly discovered daughter product of Nd¹⁵¹ is found to have a half-life of 27.5 ± 1.5 hours. The assignment of this activity to Pm¹⁵¹ is based upon the facts that it is produced by bombarding enriched Nd¹⁵⁰ with neutrons, and the internal conversion lines associated with the fifteen observed gamma-rays show work function differences of samarium.” A tentative assignment of a 12 min activity to ¹⁵¹Pm (1950Ma05) were incorrect.

Adapted from reference (2012Ma48)

- 1950Ma05 J. A. Marinsky and L. E. Glendenin, Nat. Nucl. Ener. Ser. **9**, paper194 1264 (1950).
1952Ru10 W. C. Rutledge, J. M. Cork, and S. B. Burson, Phys. Rev. **86**, 775 (1952).
2012Ma48 E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).

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