

⁸¹Y

The first observation of ⁸¹Y was reported in “New Isotope ⁸⁰Y, and the Decays of ⁷⁹Sr, ⁸¹Y, and ⁸²Y” by Lister et al. in 1981 ([1981Li12](#)). The Brookhaven Tandem Van de Graaff accelerator provided beams of 91-110 MeV ²⁵Mg which then bombarded enriched ⁵⁸Ni targets. ⁸¹Y was produced in the fusion evaporation reaction ⁵⁸Ni(²⁵Mg,*pn*)⁸¹Y. The recoil products were thermalized and deposited onto a Mylar Tape loop, where spectroscopic measurements were made. “The half-life for this new activity was measured to be 72.0±1.5 s (124-keV line) and 70±6 s (408-keV line). No evidence was found for the previously reported 5-min activity attributed to ⁸¹Y.” The reference for the 5-min activity was the 7th edition of the Table of Isotopes ([1978LeZA](#)).

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

- [1978LeZA](#) C. M. Lederer, V. S. Shirley, E. Browne, J. M. Dairiki *et al.*, Table of Isotopes, 7th Ed. , John Wiley and Sons, Inc. , New York (1978).
- [1981Li12](#) C. J. Lister, P. E. Haustein, D. E. Alburger, and J. W. Olness, Phys. Rev. C **24**, 260 (1981).
- [2012Ny02](#) A. Nystrom and M. Thoennessen, At. Data Nucl. Data Tables **98**, 95 (2012).

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