

## **<sup>151</sup>Tb**

Rasmussen et al. observed <sup>151</sup>Tb in 1953 at the University of California at Berkeley as described in the paper “Alpha-radioactivity in the 82-neutron region” ([1953Ra02](#)). Eu<sub>2</sub>O<sub>3</sub> and gadolinium targets were bombarded with 45 MeV  $\alpha$ -particles and 100 MeV protons to form <sup>150</sup>Gd in the reactions <sup>151</sup>Eu( $\alpha$ ,4n) and Gd(p,xn), respectively. Resulting  $\alpha$ -activities were measured with an ionization chamber following chemical separation. “Only a tentative mass assignment of the 19-hour activity can be made at present. The alpha-particle excitation work on europium oxide by Roller and Rasmussen indicated a probable mass assignment to 151, with 150 a possibility.” The reference of Roller and Rasmussen mentioned in the quote were unpublished results.

Adapted from reference ([2013Ma01](#))

[1953Ra02](#) J. O. Rasmussen Jr., S. G. Thompson, and A. Ghiorso, Phys. Rev. **89**, 33 (1953).

[2013Ma01](#) E. May and M. Thoennessen, At. Data Nucl. Data Tables **99**, 1 (2013).

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