^{149}Tb

^{149}Tb was observed in 1950 by Rasmussen et al. and published in the paper "Mass assignments of alpha-active isotopes in the rare-earth region" (1950Ra56). Gadolinium oxide targets were bombarded with 150 MeV protons from the Berkeley 184-inch cyclotron. ^{149}Tb was identified with a mass spectrograph following chemical separation. "The mass assignment of the alpha-emitting terbium isotope of 4.0-hr. half-life and 4.0-Mev alpha-particle energy was made by performing a mass spectrographic separation of terbium activity onto a photographic plate and detecting alpha-activity by a transfer plate technique... A concentration of alpha-tracks was observed on the transfer plate only in a region corresponding to mass 149. The 4-hr. terbium alpha-activity was the only alpha-activity here present in large enough amount to be detected by this technique."

Adapted from reference (2013Ma01)

1950Ra56 J. O. Rasmussen, F. L. Reynolds, S. G. Thompson, and A. Ghiorso, Phys. Rev. **80**, 475 (1950).

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Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"