

¹⁰⁵Cd

The new isotope ¹⁰⁵Cd was discussed in “Radioactive Isotopes of Ag and Cd” by Gum and Pool in 1950 ([1950Gu54](#)). Palladium was bombarded with 20 MeV alpha particles at Ohio State University producing ¹⁰⁵Cd in the reaction (α,n). “A Cd activity with a 57 ± 2 -min. half-life was produced when Pd was activated with 20-Mev alpha-particles... Cd bombarded with fast neutrons also yielded this activity. However, the activity is not observed when Ag is bombarded with deuterons or when Cd is bombarded with slow neutrons. These observations lead to the mass assignment of 105 for the 57-min half-life activity.”

Adapted from reference ([2010Am04](#))

[1950Gu54](#) J. R. Gum and M. L. Pool, Phys. Rev. **80**, 315 (1950).

[2010Am04](#) S. Amos and M. Thoennessen, At. Data Nucl. Data Tables **96**, 855 (2010).

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)”