^{173}Lu

In "Radioactive isotopes of lutetium and hafnium" Wilkinson and Hicks described the identification of ^{173}Lu in 1951 (1951Wi08). Targets of rare earth elements were irradiated with various light particles produced with the Berkeley 60-in. cyclotron and the linear accelerator. ^{173}Lu was primarily produced with 30−40 MeV protons on lutetium. Decay curves, absorption curves, and electron spectra were measured following chemical separation. "∼500-day Lu^{173} — The quantity of residual lutetium activity formed in decay of a sample of pure 23.6-hour Hf^{173} made by the (p,3n) reaction in the bombardment of lutetium with 25-Mev protons in the linear accelerator, together with the estimated counting efficiencies, gives a half-life of 400 to 600 days for this isotope. The direct decay has been followed only through two years as yet, yielding a value ∼500 days."

Adapted from reference (2012Gr19)

1951Wi08 G. Wilkinson and H. G. Hicks, Phys. Rev. **81**, 540 (1951).

2012Gr19 J. L. Gross and M. Thoennessen, At. Data Nucl. Data Tables **98**, 983 (2012).

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