^{184}Ta

Butement and Poe announced the discovery of ^{184}Ta at the Atomic Energy Research Establishment in Harwell, UK, in their 1955 paper "Radioactive ^{184}Tantalum" (1955Bu80). Fast neutrons produced by bombarding beryllium with 20 MeV protons were used to irradiate tungstic acid targets. Decay curves and β- and γ-spectra were measured following chemical separation. "The best values for the half-life of 8.7$\pm$0.1 h were obtained from five sources the decay of which was followed by counting those beta-particles which passed through 228 mg/cm^2 of aluminium, this being sufficient to absorb all the beta-particles from longer-lived activity present. The long-lived background activity was then reduced to that due to inefficiently counted gamma-rays. The mass assignment of the 8.7 h activity was made by the use of tungstic acid enriched in the tungsten isotope of mass 184."

Adapted from reference (2012Ro36)

1955Bu80 F. D. S. Butement and A. J. Poe, Phil. Mag. **46**, 482 (1955).

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