^{129}Sb

The discovery of ^{129}Sb was reported in the 1939 article "The Identification of Some of the Products of Uranium Cleavage" by Abelson (1939Ab04). Uranium samples were irradiated with neutrons produced by bombarding beryllium with 8 MeV deuterons from the Berkeley cyclotron. Absorption and decay curves were measured following chemical separation. "Among the active fragments of uranium fission is an antimony isotope whose half-life is 4.2 hours... Hence, the most accurate determination of the half-life of the 4.2-hour body is obtained through making periodic extractions of tellurium from antimony and then following decay curves of the separated tellurium fractions to determine the amount of seventy-minute body present at the time of extraction." The 70 min half-life was shown to be ^{129}Te. Earlier, Abelson had reported the 4.6 h half-life without a mass assignment (1939Ab05).

Adapted from reference (2013Ka01)

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