^{89}Rb

Glasoe and Steigman identified ^{89}Rb in the 1940 paper "Radioactive products from gases produced in uranium fission" (1940Gl05). Uranium nitrate was irradiated with neutrons produced by bombarding beryllium with protons from the cyclotron at Columbia University. The resulting activities were measured with Geiger Müller counters following chemical separation. "A typical decay curve for the material obtained in this manner is shown in [the figure] with the indicated half-life of 15.4±0.2 minutes. The active Sr into which this Rb decays was obtained under similar irradiation and collection conditions and was found to have a period of 51±2 days. It may be assumed that this is the same Sr isotope reported by Stewart and by DuBridge and Marshall as obtained from Sr(d,p) and assigned to Sr^{89}." Stewart (1937St01, 1939St01) and DuBridge and Marshall (1940Du11) had measured 55 d for the half-life of ^{89}Sr earlier, thus allowing the assignment of the activity observed by Glasoe and Steigman to ^{89}Rb.

Adapted from reference (2012Pa21)

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