^{125}I

In the 1947 article "A note on the long-lived radio-iodine" Glendenin and Edwards identified ^{125}I (1947Gl19). Tellurium targets were bombarded with 14 MeV deuterons from the M.I.T. cyclotron to produce ^{125}I in the reactions ^{125}Te(d,2n) and ^{124}Te(d,n). Decay curves and absorption spectra were measured with a Kr-filled Geiger counter following chemical separation. "It can be shown by various considerations that the mass number of the long-lived iodine is more probably 125 than 129 as proposed by Reid and Keston. The formation of I^{125} directly in the Te targets at the cyclotron is to be expected from the d,2n reaction on Te^{125} (6 percent abundance) and the (d,n) reaction on Te^{124} (4.5 percent abundance)." The reported half-life was 56 d. As mentioned in the quote Reid and Keston had assigned this half-life incorrectly to ^{129}Te a year earlier (1946Re11).

Adapted from reference (2013Ka01)

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