

## <sup>151</sup>Sm

<sup>151</sup>Sm was discovered in 1947 by Inghram et al. as reported in the paper “Activities induced by pile neutron bombardment of samarium” (1947In07). A Sm<sub>2</sub>O<sub>3</sub> sample was irradiated with neutrons at the Hanford Pile. <sup>151</sup>Sm was subsequently identified by mass spectroscopy at Argonne National Laboratory. “The Sm<sup>151</sup> has previously been observed only in fission. It decays with a half-life of roughly 20 years to Eu<sup>151</sup>.” The previous observation mentioned in the quote refers to the 1946 Plutonium Project report which tentatively assigned <sup>151</sup>Sm based on internal reports (1946PI01). A previous assignment of a 21-min. half-life to <sup>151</sup>Sm (1938Po05) was incorrect.

Adapted from reference (2013Ma01)

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