

¹³⁵Sm

The first identification of ¹³⁵Sm was reported in 1977 by Bogdanov et al. in “New neutron-deficient isotopes of barium and rare-earth elements” (1977Bo02). The Dubna U-300 Heavy Ion Cyclotron accelerated a ³²S beam which bombarded enriched targets of ¹⁰²Pd and ¹⁰⁶Cd. The isotopes were identified with the BEMS-2 isotope separator. “By using the BEMS-2 isotope separator with a heavy-ion beam, we succeeded in producing 19 new isotopes with mass numbers ranging from 117 to 138. Five of these (¹¹⁷Ba, ^{129,131}Nd and ^{133,135}Sm) turned out to be delayed proton emitters.” The reported half-life for ¹³⁵Sm was 10(2) s.

Adapted from reference (2013Ma01)

1977Bo02 D. D. Bogdanov, A. V. Demyanov, V. A. Karnaukhov, L. A. Petrov *et al.*, Nucl. Phys. A **275**, 229 (1977).

2013Ma01 E. May and M. Thoennessen, At. Data Nucl. Data Tables **99**, 1 (2013).

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