

¹⁵⁵Ba

The first observation of ¹⁵⁵Ba was reported by Sumikama et al. in 2026 in “Expanding the Isotopic Frontier: Seven New Neutron-Rich Rare-Earth Isotopes Observed at RIKEN RI Beam bombarded a 4 mm thick beryllium target. Factory” (2026Su01). A 345 MeV/nucleon ²³⁸U beam from the RIBF accelerator complex and the fragments of interest were selected with the BigRIPS separator. They were identified by their time-of-flight, magnetic rigidity and energy loss. “Seven new isotopes, ¹⁵²Cs, ¹⁵⁵Ba, ¹⁵⁸La, ¹⁵⁹Ce, ¹⁶⁰Ce, ¹⁷³Gd, and ¹⁷⁵Tb, were identified based on particle identification, the systematics of the measured production cross sections, and a significance test using *p*-values.” One event of ¹⁵⁵Ba was observed.

[2026Su01](#) T. Sumikama, N. Fukuda, T. Kubo, H. Suzuki *et al.*, J. Phys. Soc. Jap. **95**, 024202 (2026).

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