

¹⁹B

Musser and Stevenson discovered ¹⁹B in 1984 in “First Observation of the Neutron-Rich Isotope ¹⁹B” ([1984Mu27](#)). The Berkeley Bevalac accelerated a beam of ⁵⁶Fe to 670 A·MeV which bombarded a beryllium target. Projectile fragments were measured and identified with the 0° spectrometer facility using a detector telescope consisting of a wire-chamber hodoscope, a front scintillator paddle, a set of threshold Cherenkov counters and a back scintillator paddle. “Also shown in this figure are the predicted locations of ¹⁵B, ¹⁷B, and ¹⁹B. The previously observed particle instability of ¹⁶B and particle stability of ¹⁷B is apparent in this figure. In addition, our data indicate for the first time that ¹⁹B is particle stable, while ¹⁸B is unstable to prompt neutron emission.”

Adapted from reference ([2012Th01](#))

[1984Mu27](#) J. A. Musser and J. D. Stevenson, Phys. Rev. Lett. **53**, 2544 (1984).

[2012Th01](#) M. Thoennessen, At. Data Nucl. Data Tables **98**, 43 (2012).

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