

$^{232}\text{Th}(\text{t},\text{p})$ [1973Ba72](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	S. Ota	NDS 207,351 (2026)	1-Dec-2023

[1973Ba72](#): A ^{232}Th target (>95% enrichment) with a carbon foil backing was bombarded with a 20 MeV triton beam. The reaction protons were momentum analyzed in a broad range spectrograph and detected in photographic emulsions. 15-20 keV FWHM resolution.

[1972Ca19](#): A ^{232}Th target was bombarded with a 20 MeV triton beam. The reaction protons were studied with a broad-range spectrograph with 16-20 keV FWHM energy resolution. No excited 0^+ state was observed.

[1969Br11](#): A ^{232}Th target (>90% purity) on a thin carbon backing was bombarded with an 18 MeV triton beam. The reaction protons were measured with $\Delta\text{E-E}$ semiconductor detector at 60, 80, and 100 degrees. $Q(\text{t},\text{p})=2487.20$ was obtained for the ^{234}Th ground state. About 110 keV FWHM energy resolution.

 ^{234}Th Levels

Measured maximum σ 's were: $\sigma(0^+):\sigma(2^+):\sigma(4^+)=83:30:3$ ([1973Ba72](#)).

<u>E(level)[†]</u>	<u>Jπ[‡]</u>
0	0^+
48.2	2^+
160.5	4^+

[†] Measurements by [1973Ba72](#).

[‡] From [1973Ba72](#).