

²⁰⁹Tl

²⁰⁹Tl was identified in 1950 by Hagemann et al. from Argonne National Laboratory in “Properties of Tl²⁰⁹” (1950Ha64). A solution of ²²⁵Ac was separated from a ²³³U source. Decay curves of ²⁰⁹Tl were then measured following a second fast chemical separation. “The half-life as determined by least-squares analysis of seven such decay curves was 2.20 min., with a probable error of ±0.07 min.” The existence of ²⁰⁹Tl as part of the (4n+1) radioactive decay series had been shown earlier by the α-decay of ²¹³Bi (1947Ha02, 1947En03).

Adapted from reference (2013Fr04)

- 1947En03 A. C. English, T. E. Cranshaw, P. Demers, J. A. Harvey *et al.*, Phys. Rev. **72**, 253 (1947).
1947Ha02 F. Hagemann, L. I. Katzin, M. H. Studier, A. Ghiorso, and G. T. Seaborg, Phys. Rev. **72**, 252 (1947).
1950Ha64 F. Hagemann, Phys. Rev. **79**, 534 (1950).
2013Fr04 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 365 (2013).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”