

## <sup>193</sup>Tl

In 1960, K.F. and G.A. Chackett reported the first observation of <sup>193</sup>Tl in “New light isotopes of thallium produced by bombardment of tungsten with nitrogen ions” (1960Ch05). Enriched <sup>184</sup>W targets were bombarded with 60 MeV <sup>14</sup>N from the Nuffield cyclotron at Birmingham, England and <sup>193</sup>Tl was formed in the (5n) fusion-evaporation reaction. Following chemical separation, the activity was measured with end-window halogen-quenched G.M. tubes. “The bombardment of <sup>184</sup>W gave a thallium fraction which decayed in 30 min, 4.0 hr and 17 hr periods, confirming that 30 min <sup>193</sup>Tl is the parent of 4 hr <sup>193</sup>Hg.”

Adapted from reference (2013Fr04)

1960Ch05 K. F. Chackett and G. A. Chackett, *J. Inorg. Nucl. Chem.* **13**, 1 (1960).  
2013Fr04 C. Fry and M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 365 (2013).

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