

## $^{183}\text{Ta}$

$^{183}\text{Ta}$  was first observed by Butement at the Atomic Energy Research Establishment in Harwell, UK, in 1950 as reported in “New radioactive isotopes produced by nuclear photo-disintegration” (1950Bu07).  $^{183}\text{Ta}$  was produced through irradiation of tungstic acid by 23 MeV x-rays from the synchrotron in the photonuclear reaction  $^{184}\text{W}(\gamma,p)$  and chemically separated from other resultant isotopes (1951Bu25). In the original paper (1950Bu07) a probable assignment was only given in a table. More details were reported in the subsequent publication (1951Bu25): “The yields of 48-minute and 116-hour tantalums were in the ratio of 1:1.2 respectively, which is in conformity with the nearly equal abundances of  $^{184}\text{W}$  and  $^{185}\text{W}$ . Probably the 48-minute activity is  $^{185}\text{Ta}$  and the 116-hour activity  $^{183}\text{Ta}$ .”

Adapted from reference (2012Ro36)

- 1950Bu07 F. D. S. Butement, *Nature* **165**, 149 (1950).  
1951Bu25 F. D. S. Butement, *Proc. Phys. Soc. (London) A* **64**, 395 (1951).  
2012Ro36 R. Robinson and M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 911 (2012).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152”