

## **<sup>88</sup>Y**

In “Mass Spectrographic Mass Assignment of Radioactive Isotopes,” Hayden provided the first correct identification of <sup>88</sup>Y in 1948 ([1948Ha25](#)). A 10 mC 108-day yttrium sample produced in the Oak Ridge Clinton pile was placed in the ion source of a spectrograph. The mass separated ions were deposited on a photographic plate and the activities measured with a Geiger counter. “Upon development the original plate showed two lines one mass number apart, and the transfer plate showed one line which corresponded to the lower mass line on the original plate. Therefore the higher mass line was the normal Y<sup>89</sup>O<sup>+</sup>, and the active line one mass unit lighter was Y<sup>88</sup>O<sup>+</sup>. Thus the mass of the 108-day yttrium is 88.” In 1937, Stewart et al. assigned a 120(4) min half-life incorrectly to <sup>88</sup>Y ([1937St01](#)). A 105-day activity had been observed previously, but had been assigned to <sup>86</sup>Y ([1940Du05](#)). Subsequently this half-life (100 days) had been reported by other authors without questioning the mass assignment ([1940Pe03](#), [1941Do01](#), [1941Ri01](#)).

Adapted from reference ([2012Ny02](#))

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