^{45}Ca

In the 1940 paper "The Radioactive Isotopes of Calcium and Their Suitability as Indicators in Biological Investigations" Walke et al. described the discovery of ^{45}Ca (1940Wa03). Calcium was bombarded with 8 MeV deuterons at Berkeley and activated samples were placed inside a large expansion chamber. The number of positron tracks on photographs were counted over a 6 month period. A half-life of 180(10) d was observed. "...it is, therefore, probable that this long-lived β-radioactive calcium isotope is Ca^{45} produced by the reaction: $Ca^{44}+H^{2} \rightarrow Ca^{45}+H^{1}$; $Ca^{45} \rightarrow Sc^{45}+e^{-}$."

Adapted from reference (2011Am01)

1940Wa03 H. Walke, F. C. Thompson, and J. Holt, Phys. Rev. **57**, 177 (1940).

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