^{44}Ar

Larson and Gordon reported the observation of ^{44}Ar in the 1969 paper "Production and decay of ^{43}Ar and ^{44}Ar" (1969La16). Enriched ^{48}Ca targets were irradiated with bremsstrahlung from the linac of the Naval Research Laboratory (NRL) in Washington DC. The resulting activity was measured with a Ge(Li) detector. "These data are compared with growth curves computed for ^{44}Ar decaying with half-life of 14 min into ^{44}K, which has a 22 min half-life. A curve computed for a six min activity decaying into ^{44}K ($T_{1/2}$ = 22 min) is also shown. It can be seen that the measured values from [the figure] agree with a 14 min half-life for ^{44}Ar."

Adapted from reference (2012Th10)

1969La16 R. E. Larson and C. M. Gordon, Nucl. Phys. A **133**, 237 (1969).
2012Th10 M. Thoennessen, At. Data Nucl. Data Tables **98**, 933 (2012).

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