

³¹Cl

Benenson et al. observed ³¹Cl in 1977 at the Cyclotron Laboratory of Michigan State University as reported in “Mass of ²⁷P and ³¹Cl” (1977Be13). A ³⁶Ar gas target was bombarded with a 70 MeV ³He beam and ³¹Cl was formed in a (³He,⁸Li) reaction. The ejectiles were measured with a double proportional counter and a thin plastic scintillator at the focal plane of a split-pole spectrograph. “The final value for the Q value of ³⁶Ar(³He,⁸Li)³¹Cl was 29180±50 keV which corresponds to a mass excess of −7070±50 keV.”

Adapted from reference (2012Th10)

1977Be13 W. Benenson, D. Mueller, E. Kashy, H. Nann, and L. W. Robinson, Phys. Rev. C **15**, 1187 (1977).

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](https://doi.org/10.11578/frib/2279152)”