

Anti-Poxvirus L1 Protein [Fab 7d11] Standard Size Ab00774-1.6

This is a Fab fragment with a his-tag.

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse Fab fragment, His-Tagged, Kappa

Clone Number: Fab 7d11

Alternative Name(s) of Target:

UniProt Accession Number of Target Protein:

Published Application(s): crystallization, PRNT, ELISA

Published Species Reactivity: Poxviruses

Immunogen: This antibody was raised against Poxvirus L1 Protein.

Specificity: This antibody is specific for a conformational epitope with Asp35 as the key residue on the poxvirus L1 protein. L1 is a myristoylated, transmembrane protein found on the surface of the mature virion that plays a key role in the formation of infectious virus. L1 is conserved in all orthopoxviruses, and its sequence is almost identical among vaccinia virus (VACV), Variola virus and monkeypox virus.

Application Notes: The ability of this antibody to bind vaccinia virus has been confirmed using ELISA (Su, 2007). Both full -length and fab fragemtns of mAb-7D11, are able to neutralize VACV infection in plaque reduction-neutralization tests. However, 7D11-Fab required over 100 times greater concentrations of protein to give a similar level of neutralization to 7D11-F(ab')₂, indicating that bivalency plays a role in the capacity of mAb-7D11 to efficiently neutralize VACV. Finally, as the fab forms a stable complex with L1 protein, it has been used in X-ray crystallography studies to understand the basis of the conformational specificity of mAb-7D11 recognition (Su, 2007).

Antibody First Published in: Su et al. Structural basis for the binding of the neutralizing antibody, 7D11, to the poxvirus L1 protein. *Virology*, 2007, Vol.368(2), pp.331-341 [PMID:17688903](#)

Note on publication: Describes the original generation of this Fab and its use in X-ray crystallography studies.

Product Form

Size: 100 µg Purified antibody.

Purification: Purified by Immobilized Metal Affinity Chromatography

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.