

## Anti-Poxvirus L1 Protein [Fab 7d11] Bulk Size Ab00774-49.0-BT

This antibody does not have a J-chain.

This chimeric ferret 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:** Ferret IgM

**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')<sub>2</sub>, 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:** 500 µg Purified antibody in bulk size.

**Purification:** Affinity Purified using a recombinant lectin column

**Supplied In:** PBS only.

**Storage Recommendation:** Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.