

## Anti-Monkeypox and Vaccinia A13 protein [11F7] Standard Size Ab02996-10.0

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG2a format for improved compatibility with existing reagents assays and techniques.

**Isotype and Format:** Human IgG1, Kappa

**Clone Number:** 11F7

**Alternative Name(s) of Target:** VACV; monkeypox virus; Protein P8; A13L; vaccinia virus; smallpox virus; VACV virion membrane proteins; Virion membrane protein A13; VACWR132

**UniProt Accession Number of Target Protein:** Q76ZQ4

**Published Application(s):** neutralize, SPR, WB, ELISA, IF

**Published Species Reactivity:** Monkeypox virus, Orthopoxvirus, Vaccinia virus, variola virus

**Immunogen:** The original antibody was generated by immunizing BALB/c mice with WR strain of live vaccinia virus (VACV).

**Specificity:** This antibody binds the A13 membrane protein of the monkeypox virus and vaccinia virus. It recognizes an epitope comprising of a 10-amino acid sequence conserved in all orthopoxviruses, including variola virus and monkeypox virus.

**Application Notes:** The original IgG2a version of this antibody bound to recombinant A13 protein expressed in E. coli, MBP conjugated VACV A13 in an ELISA. The original IgG2a antibody bound recombinant A13 proteins from E. coli with an affinity of 3.4 nM as detected by surface plasmon resonance. This antibody was also capable of recognizing a 12-kda protein in a Western blot of VACV-infected HeLa cells. This antibody stained viral factories and virion-size particles in immunofluorescence analysis of infected cells. This antibody was also reported to neutralized VACV mature virions in a plaque reduction assay. Passive immunization of mice with this antibody protected mice against intranasal VACV infection. This antibody generated against smallpox vaccine might contribute to immune protection against orthopoxviruses (PMID: 21810533).

**Antibody First Published in:** Xu et al. An epitope conserved in orthopoxvirus A13 envelope protein is the target of neutralizing and protective antibodies. Virology. 2011 Sep 15; 418(1): 67-73. [PMID:21810533](#)

**Note on publication:** Describes the generation and characterization of this antibody.

## Product Form

**Size:** 200 µg Purified antibody.

**Purification:** Protein A affinity purified

**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.