

Monoclonal Antibody to Smallpox B5R (33-47) - Purified

Catalog No.: AM20365PU-N

Quantity: 0.1 mg

Concentration: 0.5 mg/ml

Background: B5R, a 561 amino acid membrane protein containing ankyrin repeats that mediate protein-protein interactions and is related to the regulators of complement activation (RCA) superfamily. It consists of four short consensus repeats (SCRs) and transmembrane anchor region or the CT (cytoplasmic tail). Its transmembrane domain is the major determinant for targeting the B5R protein to the outer membrane of EEV (extracellular enveloped virus) and for supporting EEV formation, thus playing an important role in the process of virus envelopment and release. It may also be involved in viral evasion from host immune responses. B5R is essential for efficient wrapping of IMV, actin tail formation, normal plaque size, virus virulence, incorporation of the protein into EEV and for EEV formation.

Host / Isotype: Mouse / IgG1

Recommended Isotype Controls: AM03095PU-N

Clone: 1J2F3

Immunogen: Amino acids 33-47 of the B5R protein.

AA Sequence:

IQEYNLIRTYKKVDK

Remarks: The amino acid sequence used as immunogen is 100% homologous in Variola virus, 93% homologous in Cowpox virus, Camelpox virus and Taderapox virus, 86% homologous in Vaccinia virus and 80% homologous in Ectromelia virus, Rabbitpox virus and Monkeypox virus.

Format: **State:** Liquid purified Ig fraction

Purification: Protein G Chromatography

Buffer System: PBS containing 0.2% Gelatin and 0.05% Sodium Azide

Applications: **Western blot:** 1-3 µg/ml.

Recommended Positive Control: A partial recombinant fusion protein was used to test. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: Recognizes Smallpox B5R.

Species Reactivity: **Tested:** Variola virus.

Expected from sequence similarity: Cowpox virus, Ectromelia virus, Monkeypox virus, Rabbitpox virus, Vaccinia virus

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Massung,R.F., Loparev,V.N., Knight,J.C., Totmenin,A.V., Chizhikov,V.E., Parsons,J.M., Safronov,P.F., Gutorov,V.V., Shchelkunov,S.N. and Esposito,J.J. Terminal region sequence variations in variola virus DNA. *Virology* 221 (2), 291-300 (1996).

Pictures: Western blot analysis of B5R using AM20365PU-N Smallpox B5R antibody at 0.2 µg/ml A: Recombinant fusion protein containing amino acids 33-47. B: Fusion partner without these amino acids 33-47.

