Anti-Glycoprotein D of HSV [E317] Standard Size Ab00442-1.1

This chimeric mouse antibody was made using the variable domain sequences of the original Human IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG1, Kappa
Clone Number: E317
Alternative Name(s) of Target: Envelope glycoprotein D; gD
UniProt Accession Number of Target Protein: Q69091
Published Application(s): Blocking, IP, ELISA
Published Species Reactivity: Herpes Simplex Virus
Immunogen: Herpes simplex virus 1.
Specificity: This antibody binds specifically to the glycoprotein D of HSV. The epitope core structure maps to the external surface of gD, corresponding to the binding sites of two receptors, herpesvirus entry mediator (HVEM) and nectin-1, which mediate HSV infection. E317 directly recognizes the gD-nectin-1 interface and occludes the HVEM contact site of gD to block its binding to either receptor. The binding of E317 to gD also prohibits the formation of the N-terminal hairpin of gD for HVEM recognition. The major E317-binding site on gD overlaps with either the nectin-1-binding residues or the neutralizing antigenic sites identified thus far (Tyr38, Asp215, Arg222 and Phe223). The epitopes of gD for E317 binding are highly conserved between two types of human herpesvirus (HSV-1 and HSV-2).
Application Notes: This antibody binds to glycoprotein D of HSV and blocks its intereaction with human cellular receptors. Glycoprotein D binds to cell entry receptors TNFRSF14/HVEM and others, triggering fusion with the host membrane.
Antibody First Published in: Lee et al. Structural basis for the antibody neutralization of herpes simplex virus. Acta Cystallography Section D Biological Crystallography 2013; 69(Pt19):1935-1945 PMID:24100313
Note on publication: Describes the generation of a monoclonal antibody against HSV glycoprotein D and subsequent crystallisation as well as a discussion of its potential therapeutic use.

Product Form

Size: 200 µg Purified antibody.
Purification:

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Protein A affinity purified
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -20ºC.
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.

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