Anti-HSV-1 VP5 [6F10-D2-G2] Bulk Size Ab02627-10.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

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

Isotype and Format: Human IgG1, Fc Silent™, Kappa
Clone Number: 6F10-D2-G2
Alternative Name(s) of Target: Herpes simplex virus type 1 (HSV-1) capsid protein VP5; UL19; Major capsid protein; MCP
UniProt Accession Number of Target Protein: G8HBD2
Published Application(s): functional assays, IP, WB, ELISA, IF
Published Species Reactivity: Herpes simplex
Immunogen: The original mouse version of this antibody was raised by immunizing a mouse with purified HSV-1 B capsids and recognizes amino acids 862-880 of VP5, the major capsid protein.
Specificity: This antibody is specific for residues 862-880 of the major capsid protein. The major capsid protein self-assembles to form an icosahedral capsid with a T=16 symmetry, about 200 nm in diameter, and consisting of 150 hexons and 12 pentons (total of 162 capsomers). Hexons form the edges and faces of the capsid and are each composed of six MCP molecules. In contrast, one penton is found at each of the 12 vertices. Eleven of the pentons are MCP pentamers, while the last vertex is occupied by the portal complex. The capsid is surrounded by a layer of proteinaceous material designated the tegument, which, in turn, is enclosed in an envelope of host cell-derived lipids containing virus-encoded glycoproteins.
Application Notes: To research the capsid of HSV-1, the mouse version of this antibody was used to immunoprecipitate the capsid of HSV-1 and characterized using ELISA on HSV-1 capsids (Newcomb et al., 1996; PMID: 8918599). To assess the structure of the herpes simplex virus capsid, proteins from BHK-21 cells infected with HSV-1 were immunoblotted with the mouse version of this antibody. Furthermore, the proteins from the BHK-21 cells infected with HSV-1 were immunoprecipitated with the mouse version of this antibody. The immunoprecipitated capsids bound to the mouse version of this antibody were then inspected using cryoelectron microscopy (Spencer et al., 1997; PMID: 9123829). While characterizing the mechanism of HSV-1 nucleocapsid egress, the mouse version of this antibody was used for immunofluorescence on Vero cells transfected with chimeric EGFP and/or infected with HSV-1 (Guan et al.,

2014; PMID: 25036476).
Antibody First Published in: Newcomb et al. Assembly of the herpes simplex virus capsid: characterization of intermediates observed during cell-free capsid formation J Mol Biol. 1996 Nov 1;263(3):432-46. PMID:8918599
Note on publication: With the goal of identifying morphological intermediates in the assembly process, capsid formation in a cell-free system containing the five HSV-1 proteins was examined.

Product Form

Size: 1 mg Purified antibody in bulk size.
Purification: Protein A affinity purified
Supplied In: PBS only.
Storage Recommendation: Store at 4ºC for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommed this antibody be handled under sterile conditions. 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.