Anti-Adeno associated virus [A20] Standard Size Ab03057-1.29

This is a Fab fragment with a his-tag.

This reformatted mouse 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: Mouse Fab fragment, His-Tagged, Kappa
Clone Number: A20
Alternative Name(s) of Target: AAV-2 capsid proteins; Capsid protein VP1
UniProt Accession Number of Target Protein: P03135
Published Application(s): IP, neutralizing, ELISA, IF
Published Species Reactivity: Adeno-associated virus 2
Immunogen: The original antibody was generated by immunizing BALB/c mice with a mixture of recombinant AAV capsid proteins (VP1, VP2, and VP3).
Specificity: The antibody recognizes a conformational epitope on assembled capsid proteins of AAV-2 but it fails to detect nonassembled or denatured capsid proteins.
Application Notes: The clone was used to investigate the AAV assembly process on the cellular level. The clone was used to immunoprecipitate capsid proteins from extracts of [35S]methionine-labeled HeLa cells infected with AAV-2 and adenovirus type 2. Immunofluorescence was preformed on AAV-2/adenovirus type 2-coinfected HeLa cells using this antibody (Wistuba et al, 1997; pmid:8995658). Epitope sequences on the capsid surface were identified by enzyme-linked immunoabsorbent assay using AAV-2 mutants and AAV serotypes, peptide scan, and peptide competition experiments. The clone neutralizes infection following receptor attachment by binding an epitope formed during AAV-2 capsid assembly. The antibody bound empty and full AAV-2 particles in an ELISA. In a neutralization assay, incubation of rAAV-2-GFP with A20, on HeLa cells prevented transgene expression. The clone reacted also with AAV-3 as shown by ELISA (Wobus et al, 2000; pmid:10982375). The structure for the complex AAV-2 with Fab' fragment was determined by cryo-electron microscopy (McCraw et al, 2012; pmid:22682774).
Antibody First Published in: Wistuba et al. Subcellular compartmentalization of adeno-associated virus type 2 assembly. J Virol. 1997 Feb;71(2):1341-52. PMID:8995658
Note on publication: The article describes the generation and characterization of the antibody.

Product Form

Size: 100 µg Purified antibody.
Purification: Purified by Immobilized Metal Affinity Chromatography
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.