

Anti-Adeno associated virus [A20] Bulk Size Ab03057-15.0-BT

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG3 format for improved compatibility with existing reagents assays and techniques.

Isotype and Format: Human IgM, 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: 500 µg Purified antibody in bulk size.

Purification: Affinity Purified using a recombinant lectin column

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.