

Product datasheet

anti-AAV2 (intact particle) mouse monoclonal, A20, supernatant

Short overview

Cat. No.	65155
Quantity	5 ml

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG3
Clone	A20
Immunogen	AAV2 capsids
Formulation	Contains 0.09% sodium azide
Synonym	Adeno-associated virus 2; AAV-2
Conjugate	Unconjugated
Purification	Hybridoma cell culture supernatant
Storage	2-8°C
Intended use	Research use only
Application	Affinity chromatography, ELISA, ICC/IF, IP, Neutralization assay
Reactivity	AAV2, AAV2 7m8, AAV3
No reactivity	AAV1, AAV11, AAV12, AAV4, AAV5, AAV6, AAV7, AAV8, AAV9, AAVDJ, AAVrh10, AAVrh74

Applications

Affinity Chromatography	Assay dependent
ELISA	Assay dependent
Immunocytochemistry (ICC)	Assay dependent
Immunoprecipitation (IP)	Assay dependent
Neutralization Assay	Assay dependent

Background

For characterization of different stages of infection and very useful for the analysis of the AAV2 assembly process. A20 specifically reacts with AAV2 and AAV3, empty and full capsids. Recognizes a conformational epitope of assembled capsids, not present in denatured capsid proteins and native but unassembled capsid proteins. The antibody cannot be used for immunoblotting. Epitope mapping experiments (Wobus et al. 2000) identified four immunoreactive (discontinuous) regions. The major reaction was attributed to sequence aa 369 to aa378 of AAV2 capsids. The antibody is also useful for neutralizing experiments.

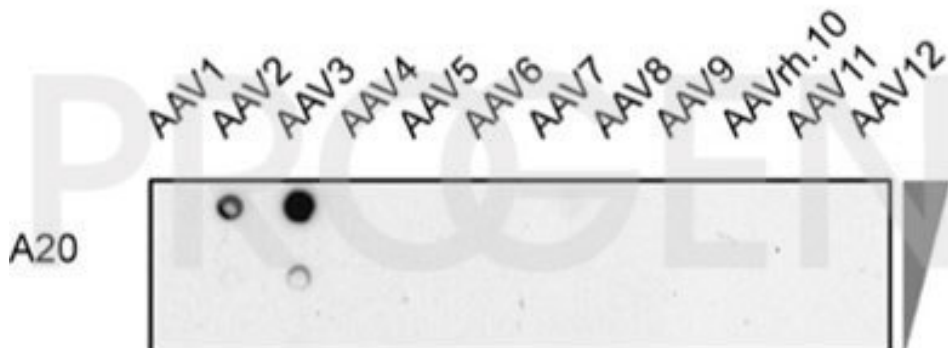
Wobus, C. E. et al. Monoclonal antibodies against the adeno-associated virus type 2 (AAV-2) capsid: epitope mapping and identification of capsid domains involved in AAV-2-cell interaction and neutralization of AAV-2 infection. J. Virol. 74, 9281-93 (2000). Moskalenko, M. et al. Epitope Mapping of Human Anti-Adeno-Associated Virus Type 2 Neutralizing Antibodies: Implications for Gene Therapy and Virus Structure. Journal Virol.

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Product images



Dot blot with different AAV serotypes and mouse monoclonal anti-AAV2 antibody, clone A20 (Courtesy of Regina Heilbronn, Charité Universitätsmedizin Berlin, Mietzsch et al. Hum Gene Ther. 2014 Mar 1; 25(3):212-222)

References

Publication	Species	Application
Ohba K. et al. Adeno-associated virus vector system controlling capsid expression improves viral quantity and quality., iScience, 26, 106487, (2023).	AAV2	IP
Haar, J., Blazevic, D., Strobel, B., Kreuz, S. & Michelfelder, S. MSD-based assays facilitate a rapid and quantitative serostatus profiling for the presence of anti-AAV antibodies. Mol. Ther. - Methods Clin. Dev. 25, 360â€“369 (2022).	AAV2	IA
Emmanuel, S. N., Mietzsch, M., Tseng, Y. S., Smith, J. K. & Agbandje-Mckenna, M. Parvovirus Capsid-Antibody Complex Structures Reveal Conservation of Antigenic Epitopes across the Family. Viral Immunol. 34, 3â€“17 (2021).	AAV2	binding region
Hamann, M. V. et al. Improved targeting of human CD4+ T cells by nanobody-modified AAV2 gene therapy vectors. PLoS One 16, (2021).	AAV2	dot blot
Bennett, A. et al. Structure comparison of the chimeric AAV2.7m8 vector with parental AAV2. J. Struct. Biol. 209, 107433 (2020).	AAV2,AAV2.7m8	dot blot