Product datasheet

anti-AAV6 (intact particle) mouse monoclonal, ADK6, lyophilized, purified

Short overview

Cat. No.	610159
Quantity	50 µg
Concentration	50 µg/ml after reconstitution with 1 ml PBS

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG2a kappa
Clone	ADK6
Immunogen	AAV6 capsids
Formulation	Lyophilized; reconstitute in 1 ml sterile PBS
Synomym	Adeno-associated virus 6; AAV-6
Conjugate	Unconjugated
Purification	Affinity chromatography
Storage before reconstitution	2-8°C until indicated expiry date
Storage after reconstitution	Up to 3 months at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
Intended use	Research use only
Application	Dot blot, ELISA, ICC/IF, Neutralization assay
Reactivity	AAV6
No reactivity	AAV1, AAV11, AAV12, AAV2, AAV3, AAV4, AAV5, AAV7, AAV8, AAV9, AAVDJ, AAVrh10, AAVrh74

Applications

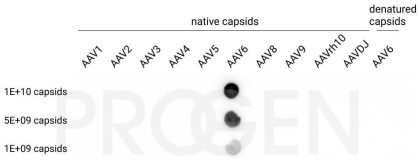
Dot Blot	1:500 (0.1 µg/ml; non-denaturing conditions)
ELISA	Assay dependent
Immunocytochemistry (ICC)	Assay dependent
Neutralization Assay	Assay dependent

Background

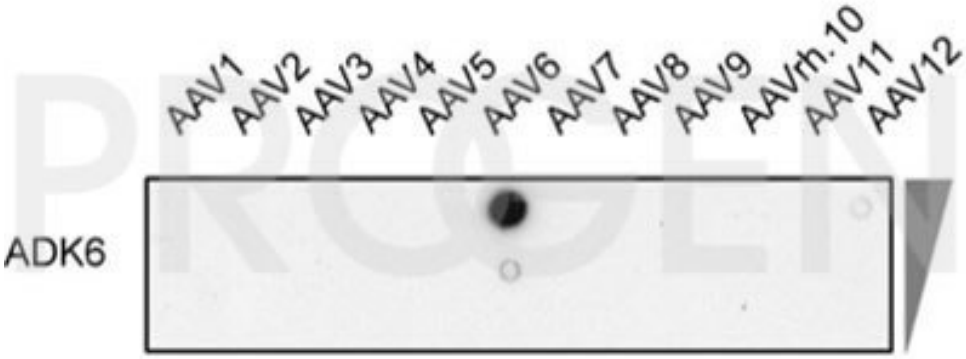
For characterization of different stages of infection and very useful for the analysis of the AAV6 assembly process. ADK6 specifically reacts with intact adeno-associated virus 6 particles, empty and full capsids. Recognizes a conformational epitope of assembled capsids. The antibody cannot be used for immunoblotting.The antibody is also useful for neutralizing experiments.

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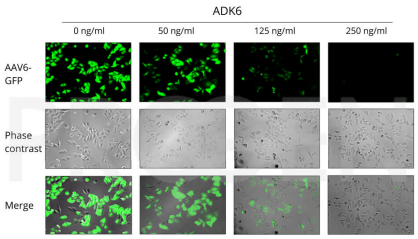
Product images



Dot blot analysis of native AAV1-AAV9, AAVrh10, AAVDJ capsids (1E+09-1E+10 capsids) and denatured AAV6 capsids (1E+09-1E+10 capsids, denatured at 95°C for 10 min in sample buffer).The nitrocellulose membrane was blocked with 5% dry milk in PBST (PBS + 0.1% Tween 20) for 1 h at RT. The primary antibody anti-AAV6 (intact particle) mouse monoclonal, ADK6 (Cat. No. 610159) was diluted in blocking buffer (antibody concentration 100 ng/ml) and incubated for 1 h at RT. The secondary antibody goat anti-mouse IgG HRP was also diluted in blocking buffer (antibody concentration 200 ng/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using Pierce ECL Plus Western Blotting Substrate.



Dot blot with different AAV serotypes and mouse monoclonal anti-AAV6 antibody, clone ADK6 (Courtesy of Regina Heilbronn, Charité Universitätsmedizin Berlin, Mietzsch et al. Hum Gene Ther. 2014 Mar 1; 25(3):212-222)



Neutralization of AAV6-GFP vectors with the ADK6 antibody (Cat. No. 610159). AAV infection was shown in HeLa cells and photos (GFP, CPE, merge) were taken ~48 h post infection. Neutralization was enhanced with increasing ADK6 concentration.

References

Publication	Species	Application
Mietzsch, M. et al. OneBac: Platform for Scalable and High-Titer Production of Adeno-Associated Virus Serotype 1-12 Vectors for Gene Therapy. Hum. Gene Ther. 25, 212-222 (2014).	AAV6	dot blot
Sonntag, F. et al. The Assembly-Activating Protein Promotes Capsid Assembly of Different Adeno-Associated Virus Serotypes. J. Virol. 85, 12686-12697 (2011).	AAV6	dot blot
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).	AAV6	binding region
Bennett, A. D. et al. AAV6 K531 serves a dual function in selective receptor and antibody ADK6 recognition. Virology 518, 369-376 (2018).	AAV6	neutralization
Cao, L., Ledeboer, A., Pan, Y., Lu, Y. & Meyer, K. Clinical enrollment assay to detect preexisting neutralizing antibodies to AAV6 with demonstrated transgene expression in gene therapy trials. Gene Ther. 1â€“10 (2022).	AAV6	TI assay