Product datasheet

anti-AAV VP1 mouse monoclonal, A1, lyophilized, purified

Short overview

Cat. No.	61056
Quantity	50 µg
Concentration	50 µg/ml after reconstitution with 1 ml sterile PBS

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG2a
Clone	A1
Immunogen	AAV2 capsids
Formulation	Lyophilized; reconstitute in 1 ml sterile PBS
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	ELISA, ICC/IF, IP, WB
Reactivity	AAV1, AAV2, AAV3, AAV5, AAV6, AAV7, AAV8, AAV9, AAVDJ

Applications

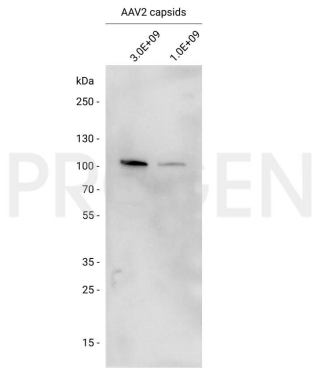
ELISA	Assay dependent
Immunocytochemistry (ICC)	Assay dependent
Immunoprecipitation (IP)	Assay dependent
Western Blot (WB)	1:500 (0.1 µg/ml)

Background

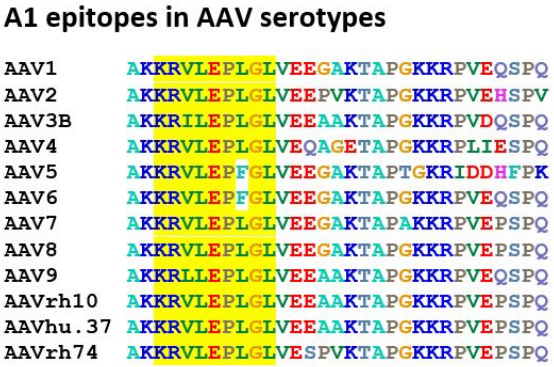
A1 reacts with VP1 of adeno-associated virus 1-9 and DJ (AAV1-9, DJ). In immunoprecipitation, an occasional reaction with a non-AAV-derived protein is found. Epitope mapping experiments (Wobus et al. 2000) identified aa123 to aa131 of VP1 capsid protein as the specific binding region.

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, 928193 (2000).

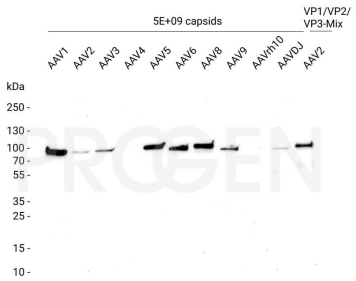
Product images



Western blot analysis of AAV2 capsids with anti-AAV VP1 antibody. Western blot analysis was performed on either 3.0E+09 or 1.0E+09 AAV2 capsids. The PVDF membrane was blocked with 5% dry milk in PBST for 1 h at RT. The primary antibody anti-AAV VP1, mouse monoclonal, A1 was diluted in blocking buffer (antibody concentration 0.1 µg/ml) and incubated for 1 h at RT. The secondary antibody goat anti-mouse IgG polyclonal, HRP conjugate was also diluted in blocking buffer (antibody concentration 0.2 µg/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using PierceTM ECL Western Blotting Substrate.



Alignment of A1 epitopes in different AAV serotypes.



Western blot analysis of denatured AAV1-AAV9, AAVrh10, AAVDJ capsids (5E+09 capsids, denatured at 95°C for 10 min in sample buffer) and recombinant AAV2 VP1/VP2/VP3-Mix (50 ng, Cat. No. 72001).The PVDF membrane was blocked with 5% dry milk in PBST (PBS + 0.1% Tween 20) for 1 h at RT. The primary antibody anti-AAV VP1, mouse monoclonal, A1 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 Western Blotting Substrate.

References

Publication	Species	Application
Mietzsch, M. et al. OneBac: Platform for Scalable and High-Titer Production of Adeno-Associated Virus Serotype 1â€“12 Vectors for Gene Therapy. Hum. Gene Ther. 25, 212â€“222 (2014).	AAV1,AAV2,AAV3,AAV4,AAV5,AAV6,AAV7,AAV8,AAV9,AAVrh10,AAV11,AAV12	WB
Grimm, D., Kay, M. A. & Kleinschmidt, J. A. Helper virus-free, optically controllable, and two-plasmid-based production of adeno-associated virus vectors of serotypes 1 to 6. Mol. Ther. 7, 839â€“850 (2003).	AAV2	WB
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, 9281â€“93 (20	AAV2	epitope mapping
Wistuba, A. et al. Subcellular Compartmentalization of Adeno-Associated Virus Type 2 Assembly. J. Virol. 71, 1341â€“1352 (1997).	AAV2	WB,ICC-IF