Product datasheet

anti-AAV VP1/VP2 mouse monoclonal, A69, lyophilized, purified

Short overview

Cat. No.	61057
Quantity	50 µg
Concentration	50 µg/ml after reconstitution with 1 ml dist. water

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG1
Clone	A69
Immunogen	AAV2 capsids
Formulation	Lyophilized; reconstitute in 1 ml dist. water (final solution contains 0.09 % sodium azide, 0.5% BSA in PBS buffer, pH 7.4)
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	ICC/IF, IP, WB
Reactivity	AAV2, AAVDJ

Applications

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

Background

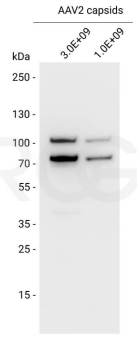
A69 reacts with VP1 and VP2 of adeno-associated virus 2 (AAV2) which are highly enriched in the nucleus. Epitope mapping experiments (Wobus et al. 2000) identified aa169 to aa184 of VP2 and (with reduced intensity) aa123 to aa136 of VP1 capsid proteins as the specific binding region.

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).

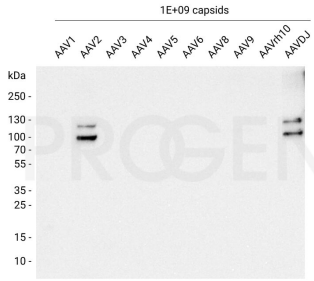
Product images



Alignment of A69 epitopes in different AAV serotypes.



Western blot analysis of AAV2 capsids with anti-AAV VP1/VP2 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/VP2 mouse monoclonal, A69 (Cat. No. 61057) 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.



Western blot analysis of denatured AAV1-AAV9, AAVrh10, AAVDJ capsids (1E+09 capsids, denatured at 95°C for 10 min in sample buffer). 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/VP2 mouse monoclonal, A69 (Cat. No. 61057) 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
Hamann, M. V. et al. Improved targeting of human CD4+ T cells by nanobody-modified AAV2 gene therapy vectors. PLoS One 16, (2021).	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,IP,ICC-IF
Wistuba, A., Weger, S., Kern, A., Rgen, J. & Kleinschmidt, A. Intermediates of Adeno-Associated Virus Type 2 Assembly: Identification of Soluble Complexes Containing Rep and Cap Proteins. J. Virol. 69, 5311â€“5319 (1995).	AAV2	WB,IP