Product datasheet

anti-AAV8, human chimeric, ADK8-h1

Short overview

Cat. No.	692318
Quantity	1 ml
Concentration	50 µg/ml

Product description

Host	Recombinant chimeric (human Fc region)
Antibody Type	Monoclonal
Isotype	IgG1
Conjugate	Unconjugated
Purification	Affinity chromatography
Storage	2-8°C
Intended use	Research use only
Application	Dot blot, Neutralization assay, Serology ELISA
Reactivity	AAV3, AAV7, AAV8, AAVrh10, AAVrh74
No reactivity	AAV1, AAV2, AAV4, AAV5, AAV6, AAV9, AAVDJ

Applications

Serology Assay	0.1-0.4 µg/ml (1:125-1:500; AAV8 ELISA)
Dot Blot	0.1 µg/ml (1:500; non-denaturing conditions)
Neutralization Assay	EC50 ~26 ng/ml (AAV3), ~2 ng/ml (AAV8) - assay dependent

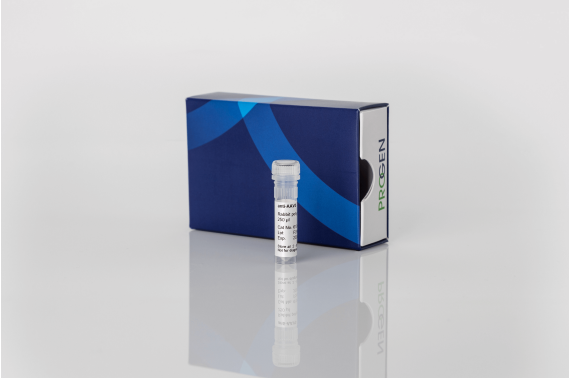
Background

Our human chimeric AAV antibodies are derived from our mouse monoclonal AAV antibodies and are a combination of the mouse antigen binding region and a human Fc region. Therefore, it provides the well-known characteristics of the corresponding mouse monoclonal antibody (anti-AAV8, ADK8, Cat. No. 610160) like cross-reactivity and neutralization activity combined with a human Fc region allowing the use in an anti-human secondary antibody detection system.

Many humans in the general population have developed antibodies against AAV as a result of naturally acquired infections, which might affect efficacy and safety of the gene transfer using AAV vectors. Therefore, testing for pre-existing AAV antibodies in patient sera is an indispensable step for the selection of patients for AAV gene therapy clinical trials.

Our human chimeric AAV antibodies are close to the human derived samples, making them the ideal positive control for reproducible and comparable serological assays.

Product images



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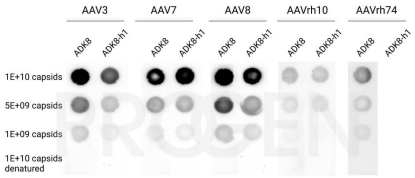
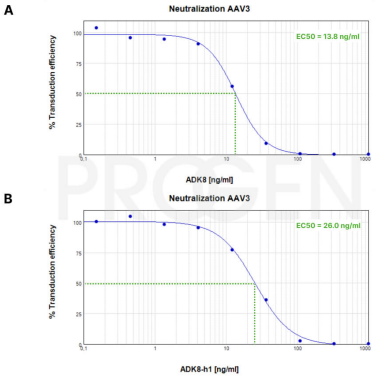


Dot blot analysis of AAV3, AAV7, AAV8, AAVrh10 and AAVrh74 native (1E+09-1E+10 capsids) and denatured (1E+10 capsids, denatured at 95°C for 10 min in sample buffer) capsids with mouse monoclonal AAV8 antibody clone ADK8 and human chimeric AAV8 antibody clone ADK8-h1. The nitrocellulose membrane was blocked with 5% milk in PBST for 45 min at RT. The primary antibody anti-AAV8 (intact particle) mouse monoclonal, ADK8 (Cat. No. 610160) or anti-AAV8, human chimeric, ADK8-h1 (Cat. No. 692318) was diluted in blocking buffer (antibody concentration 100 ng/ml) and incubated for 1.5 h at RT. The secondary antibody anti-mouse IgG goat polyclonal, HRP conjugate or anti-human IgG goat polyclonal, HRP conjugate was also diluted in blocking buffer (antibody concentration 200 ng/ml) and incubated for 1.5 h at RT. The bands were visualized by chemiluminescent detection using Pierce ECL Western Blotting Substrate.



Neutralization of AAV3 with mouse monoclonal AAV8 antibody clone ADK8 (A) and human chimeric AAV8 antibody clone ADK8-h1 (B) by using AAV3-NanoLuc® viral particles from Promega. (A) anti-AAV8 (intact particle) mouse monoclonal, ADK8 or (B) anti-AAV8, human chimeric, ADK8-h1 (Cat. No. 692318) were preincubated with AAV3-NanoLuc® viral particles for 30 min at RT at 300 rpm (antibody concentrations 0.2-3,000 ng/ml). HEK293 cells (100 µl) were plated at 200,000 cells/ml in DMEM + 1% FCS. Virus-antibody-mix (20 µl) was added to the cells and incubated for 16-24 h at 37°C. Extracellular NanoLuc Inhibitor and Nano-Glo® Live Cell Assay System (Promega) was added to the wells and incubated for 5 min at RT at 300 rpm. Luminescence was measured using an ID5-Reader and plotted with Softmax Pro 7.1 software to determine the EC50 values.