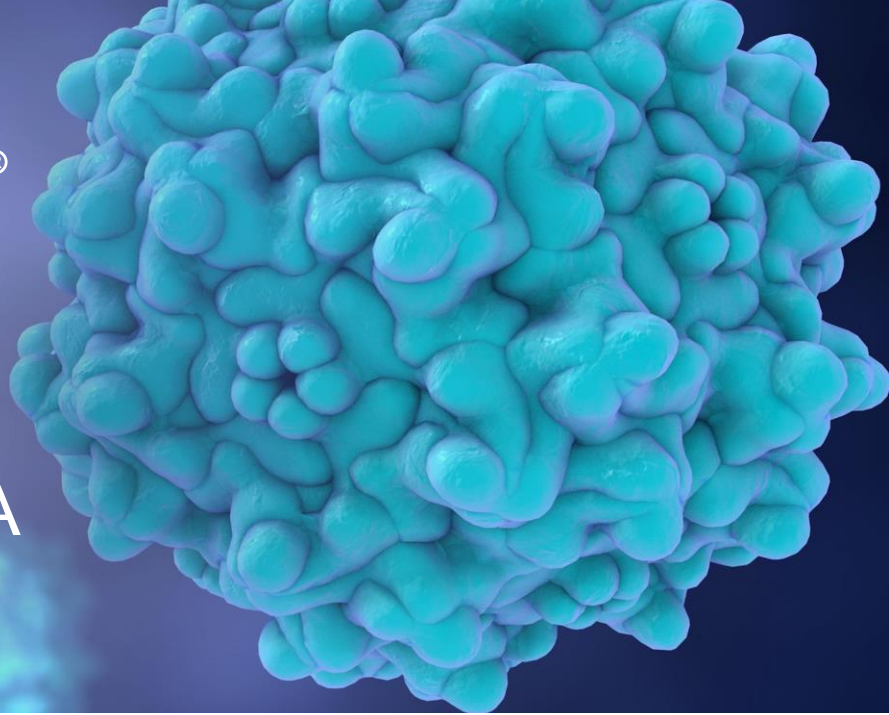


AAV Titration ELISA



Introduction:

Adeno-Associated Virus (AAV) is a nonpathogenic virus that is widely used as vector in gene therapy. Gene therapy vectors using AAV can infect both dividing and quiescent cells and persist in an extrachromosomal state without integrating into the genome of the host cell, although in the native virus some integration of virally carried genes into the host genome does occur. These features make AAV a very attractive candidate for creating viral vectors for gene therapy, and for the creation of isogenic human disease models.

Creative Diagnostics currently provide full range of adeno-associated virus (AAV) antibodies that specifically recognize intact virus capsids as well as antibodies specific to AA-viral subunits and replicases. Titration ELISA kits for various AAV subtype is also available.

Features:

- Efficiently & sensitively monitor AAV capsids
- Specifically recognize intact virus capsids
- High reproducibility of measured values
- Quantitative ELISA Kits
- Lot-to-lot consistency
- Faster & easier than cell-based assay

Product list:

ELISA Kits

Cat. No.	Product Name	Detection Sample	Recovery	Precision	Detection Range
DEIA589	AAV2 Titration ELISA Kit	cell culture supernatants, purified virus preparations	70-120%	Intra-assay CV<10% Inter-assay CV<15%	0-2.50E+09vg/ml
DEIAAV6	AAV6 Titration ELISA Kit	cell culture supernatants, purified virus preparations	70-120%	Intra-assay CV<10% Inter-assay CV<15%	0-3.00E+09vg/Tml

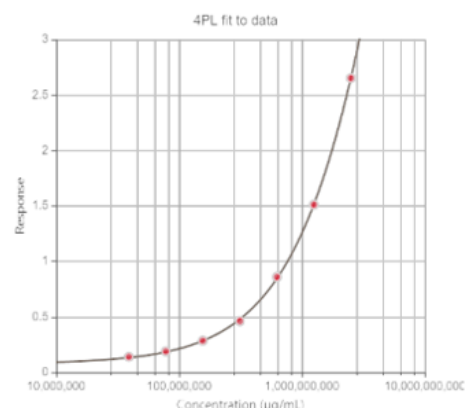
AAV Titration ELISA

Cat. No.	Product Name	Detection Sample	Recovery	Precision	Detection Range
DEIAAV8	AAV8 Titration ELISA Kit	cell culture supernatants, purified virus preparations	70-120%	Intra-assay CV<10% Inter-assay CV<15%	0-2.65E+09vg/ml
DEIAAV9	AAV9 Titration ELISA Kit	cell culture supernatants, purified virus preparations	70-120%	Intra-assay CV<10% Inter-assay CV<15%	0-1.47E+09vg/ml

Typical Standard Curve of ELISA Kits

DEIA589:

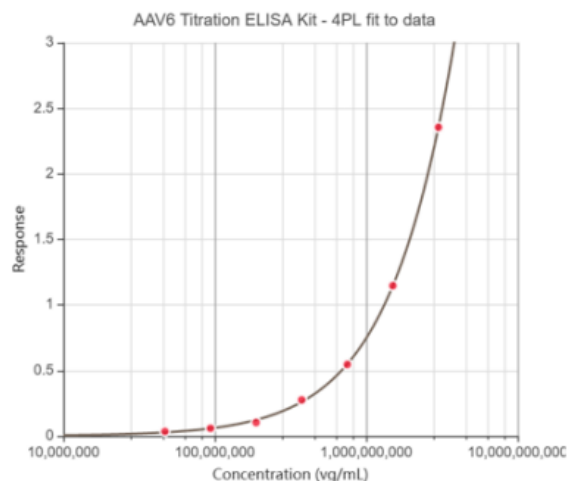
AAV2 Capsids vg/mL	OD450-620nm		
	(1)	(2)	Average
2.50E+09	2.671	2.635	2.653
1.25E+09	1.540	1.483	1.512
6.25E+08	0.844	0.875	0.860
3.13E+08	0.491	0.436	0.463
1.56E+08	0.294	0.278	0.286
7.81E+07	0.195	0.186	0.190
3.91E+07	0.140	0.141	0.141
0.00E+00	0.067	0.078	0.073



$y = d + \frac{a-d}{1+(\frac{x}{c})^b}$	a	b	c	d	R ²
	0	0.979	1.14E+09	14.06	1

DEIAAV6:

AAV6 Capsids vg/mL	OD450-620nm		
	(1)	(2)	Average
3.00E+09	2.3435	2.4258	2.3847
1.50E+09	1.1084	1.2430	1.1757
7.50E+08	0.5772	0.5725	0.5749
3.75E+08	0.2784	0.3315	0.3050
1.88E+08	0.1178	0.1465	0.1322
9.38E+07	0.0833	0.0923	0.0878
4.69E+07	0.0565	0.0692	0.0629
0.00E+00	0.0321	0.0245	0.0283

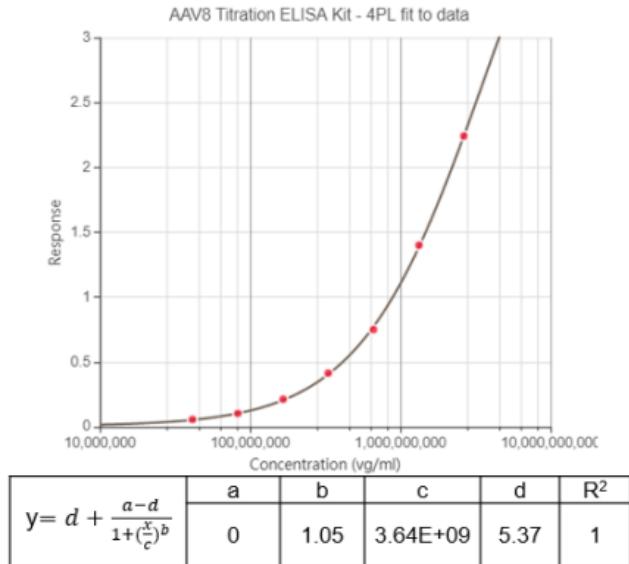


$y = d + \frac{a-d}{1+(\frac{x}{c})^b}$	a	b	c	d	R ²
	0	1.089	3.44E+10	9.46	1

AAV Titration ELISA

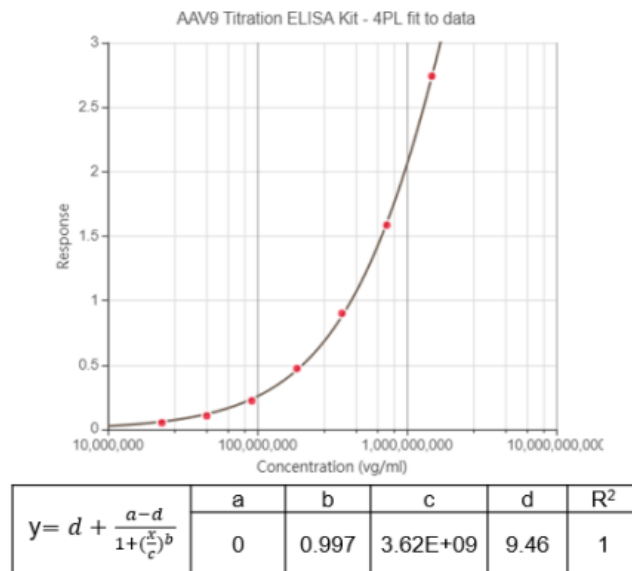
DEIAAV8:

AAV8 Capsids vg/mL	OD450-620nm		
	(1)	(2)	Average
2.65E+09	2.4463	2.3357	2.3910
1.33E+09	1.5309	1.5688	1.5499
6.63E+08	0.8904	0.9070	0.8987
3.31E+08	0.5704	0.5562	0.5633
1.66E+08	0.3717	0.3535	0.3626
8.28E+07	0.2557	0.2506	0.2532
4.14E+07	0.2057	0.2067	0.2062
0.00E+00	0.1540	0.1433	0.1487



DEIAAV9:

AAV9 Capsids vg/mL	OD450-620nm		
	(1)	(2)	Average
1.47E+09	2.7588	2.8393	2.7991
7.35E+08	1.6457	1.6395	1.6426
3.68E+08	0.9433	0.9751	0.9592
1.84E+08	0.5611	0.5005	0.5308
9.19E+07	0.2714	0.288	0.2797
4.59E+07	0.1637	0.1617	0.1627
2.30E+07	0.1109	0.1088	0.1099
0.00E+00	0.0547	0.0614	0.0581



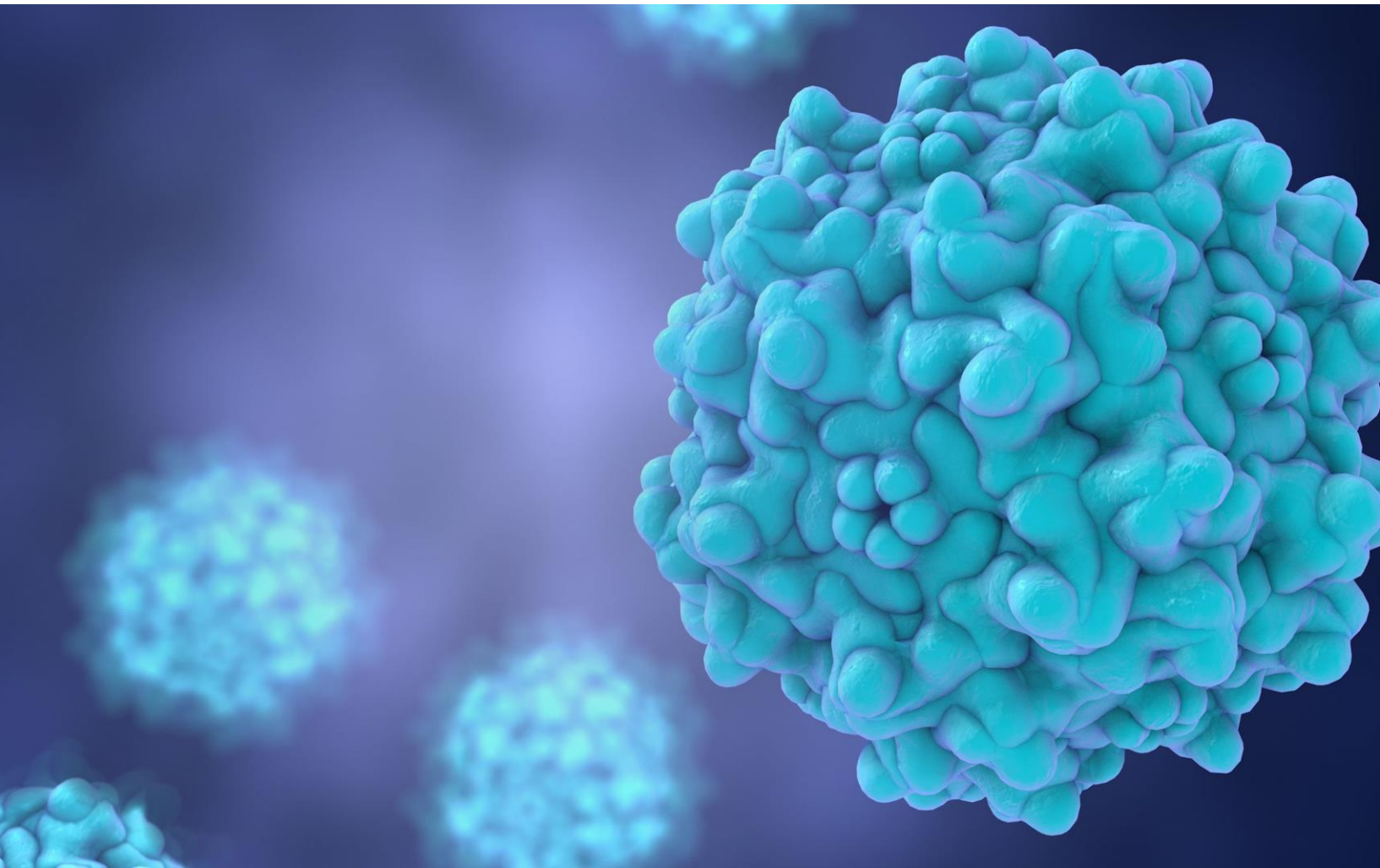
Adeno-Associated Virus (AAV) Related Antibodies

Cat. No.	Product Name	Description
DMAB6351	Anti-AAV1 (intact particle) monoclonal antibody, Clone BEL2b [Biotin]	Specifically detects AAV1 intact virus particles, both empty and full capsids. DMAB6351 recognizes a conformational epitope of assembled capsids, not present in denatured and native unassembled capsid proteins. Not suitable for Immunoblotting. In immunofluorescence, a weak cross-reactivity was observed with AAV6. No reaction with AAV type 2, 3, 4, 5.
DMAB6350	Anti-AAV1 (intact particle) monoclonal antibody, Clone BEL2b	Specifically detects AAV1 intact virus particles, both empty and full capsids. DMAB6350 recognizes a conformational epitope of assembled capsids, not present in denatured and native unassembled capsid proteins. Not suitable for Immunoblotting. In immunofluorescence and dot plot analysis, a weak cross-reactivity was observed with AAV6 and AAV12. No reaction with other AAV types.
CABT-B9061	Anti-AAV2 (intact particle) monoclonal antibody, clone B31 [Biotin]	Specifically detects intact virus particles, both empty and full capsids. With AAV2 and AAV3 CABT-B9061 recognizes a conformational epitope of assembled capsids, not present in denatured and native unassembled capsid proteins. Not for WB.
CABT-B9062	Anti-AAV2 (intact particle) monoclonal antibody, clone B31	Specifically detects intact virus particles, both empty and full capsids. With AAV2 and AAV3 CABT-B9061 recognizes a conformational epitope of assembled capsids, not present in denatured and native unassembled capsid proteins. Not for WB.
DMAB6346	Anti-AAV2 Replicase monoclonal antibody, Clone A227.8	Recognizes AAV replicase proteins Rep 78, Rep 68, Rep 52 and Rep 40 in AAV-infected cells. In Immunoblotting prominent reaction with Rep 78 and Rep 68, only faint reaction with Rep 52 and Rep 40.
DMAB6345	Anti-AAV2 Replicase monoclonal antibody, Clone A304.10	Recognizes AAV replicase proteins Rep 78, Rep 68, Rep 52 and Rep 40 in human AAV-2-infected cells. Cross-reactivity with AAV serotypes 1, 3, 4, 5, 6, 7, 8, 9 and 10 (4,11 and 12 were negative). A weak cross-reactivity is seen in some human cell lines.
DMAB6347	Anti-AAV2 Replicase monoclonal antibody, Clone A77.4	Recognizes AAV replicase proteins Rep78 and Rep52 in human AAV2-infected cells, no reaction with Rep68 and Rep40. Weak cross-reaction with AAV-serotype 3.
DMAB6348	Anti-AAV2 VP1 monoclonal antibody, Clone B2	DMAB6348 reacts with VP1 of AAV-2; weak cross-reaction with serotypes 1, 3, 4, 5, 6. In immunoprecipitation, an occasional reaction with a non-AAV-derived protein is found.
DMAB6349	Anti-AAV2 VP1/VP2 monoclonal antibody, Clone B610	Recognizes AAV-2 viral capsid proteins VP1 and VP2, which are highly enriched in the nucleus. Weak cross-reaction with serogroups 1, 3, and 6.
DPAB2423	Anti-AAV2 VP1/VP2/VP3 polyclonal antibody	Reacts with VP1, VP2 and VP3. Raised against recombinant AAV-2 capsid proteins.
CABT-B9063	Anti-AAV4 (intact particle) monoclonal antibody, clone BEL5 [Biotin]	Specifically detects AAV4 intact virus particles, both empty and full capsids. CABT-B9063 recognizes a conformational epitope of assembled capsids not present in denatured and native unassembled capsid proteins. No cross-reaction with other AAV serotypes.

DMAB6352	Anti-AAV4 (intact particle) monoclonal antibody, Clone BEL5	Specifically detects AAV4 intact virus particles, both empty and full capsids. DMAB6352 recognizes a conformational epitope of assembled capsids not present in denatured and native unassembled capsid proteins. No cross-reaction with other AAV serotypes.
DMAB6355	Anti-AAV5 (intact particle) monoclonal antibody, Clone BEL6b [Biotin]	Specifically detects intact virus particles, both empty and full capsids. DMAB6355 recognizes a conformational epitope of assembled capsids, not present in denatured and native unassembled capsid proteins. No cross-reaction with other AAV serotypes. The antibody is not suitable for Immunoblotting.
DMAB6353	Anti-AAV5 (intact particle) monoclonal antibody, Clone BEL6b	Specifically detects intact virus particles, both empty and full capsids. DMAB6353 recognizes a conformational epitope of assembled capsids, not present in denatured and native unassembled capsid proteins. No cross-reaction with other AAV serotypes. The antibody is not suitable for Immunoblotting.
DMAB6354	Anti-AAV5 (intact particle) monoclonal antibody, Clone BEL6c	Specifically detects intact virus particles, both empty and full capsids. DMAB6353 recognizes a conformational epitope of assembled capsids, not present in denatured and native unassembled capsid proteins. No cross-reaction with other AAV serotypes. The antibody is not suitable for Immunoblotting.
DPAB2424	Anti-AAV5 polyclonal antiserum	Raised against recombinant AAV5 capsid proteins. The antibody reacts with virus capsid proteins VP1, VP2, VP3 of AAV5; no cross-reaction with AAV types 1-4.
CABT-B9064	Anti-AAV6 (intact particle) monoclonal antibody, clone BEL7	Useful for analysis of the AAV assembly process. CABT-B9064 specifically reacts with intact adeno-associated virus particles, empty and full capsids. Recognizes a conformational epitope of assembled capsids. Specific for AAV-6. No cross-reaction with AAV type 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, and 12 was observed. Not for use in WB.
CABT-B9065	Anti-AAV8 (intact particle) monoclonal antibody, clone BEL9	For characterization of different stages of infection and very useful for analysis of the AAV assembly process. CABT-B9065 specifically reacts with intact adeno-associated virus particles, empty and full capsids. Recognizes a conformational epitope of assembled capsids. Not for use in immunoblotting.
CABT-B9066	Anti-AAV8/9 (intact particle) monoclonal antibody, clone BEL9/0	For characterization of different stages of infection and very useful for analysis of the AAV assembly process. CABT-B9066 specifically reacts with intact adeno-associated virus particles, empty and full capsids. Recognizes a conformational epitope of assembled capsids. The antibody cannot be used for immunoblotting using denaturing conditions.
DPAB-AV01	Anti-AAV9 (intact particles) monoclonal antibody, clone BEL0	Useful for analysis of the AAV assembly process. DPAB-AV01 specifically reacts with intact adeno-associated virus particles, empty and full capsids. Recognizes a conformational epitope of assembled capsids. Not for use in WB.

CREATIVE DIAGNOSTICS

AAV Titration ELISA



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