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Datasheet for 200-4333

Ovalbumin Antibody Peroxidase Conjugated

Overview

Description:	Anti-Ovalbumin (Hen Egg White) (RABBIT) Antibody Peroxidase Conjugated (BULK ORDER) - 200-4333
Item No.:	200-4333
Size:	20 mg
Applications:	ELISA, WB
Reactivity:	Chicken
Host Species:	Rabbit

Product Details

Background:	Anti-Ovalbumin Antibody detects Ovalbumin. Ovalbumin is the main protein found in egg white, making up 60-65% of the total protein. It is a non-inhibitory serpin. It is the storage protein of egg white. Anti-Ovalbumin Antibody is ideal for investigators involved in Cell Signaling, Immunology and Signal Transduction research.
Synonyms:	rabbit anti-Ovalbumin Antibody Peroxidase Conjugation, HRP conjugated rabbit anti-Ovalbumin antibody, Egg albumin antibody, Plakalbumin, Allergen Gal d II, Allergen=Gal d 2, Hen Egg White
Host Species:	Rabbit
Conjugate:	Peroxidase (HRP)
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SERPINB14
Reactivity:	Chicken
Immunogen Type:	Native Protein
Immunogen:	Anti-Ovalbumin Antibody was produced by repeated immunizations with hen egg white Ovalbumin protein.

Purity/Specificity:	Ovalbumin Antibody is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Peroxidase, anti-Rabbit Serum as well as purified and partially purified Ovalbumin [Hen Egg White]. Cross reactivity against Ovalbumin from other tissues and species may occur but have not been specifically determined.
Relevant Links:	• 200-4333 SDS • NCBI - P01012.2 • UniProtKB - P01012 • GeneID - 396058

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-Ovalbumin Antibody Peroxidase Conjugated has been tested by ELISA and western blot and is suitable for IHC and IP. Researchers should determine optimal titers for applications that are not stated below.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:25,000
IHC:	1:500 - 1:2,500
IP:	1:100
WB:	1:1,000 - 1:5,000

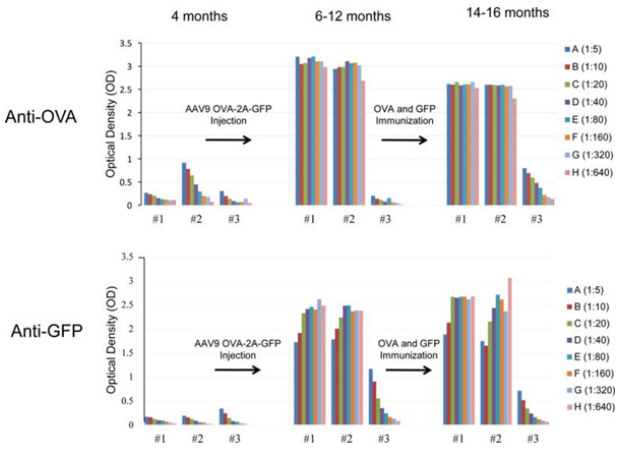
Formulation

Physical State:	Lyophilized
Concentration:	10.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide!
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

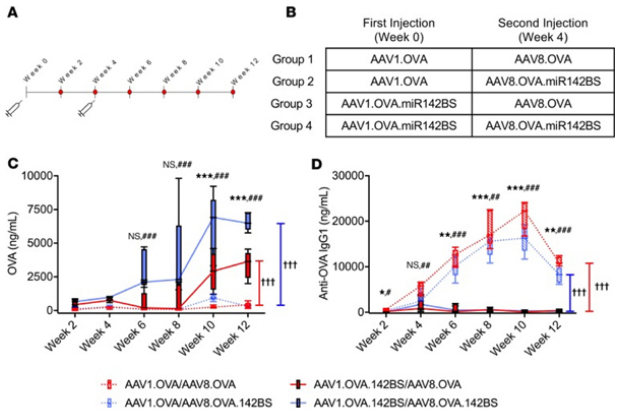
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



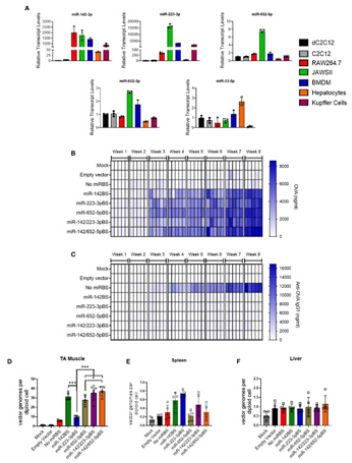
ELISA
Humoral immune responses against OVA and GFP were assessed after neonatal AAV injections and OVA and GFP vaccinations by ELISA. Two-fold serial dilutions of serum were prepared beginning from 1:5 to 1:640. Results are reported as the optical density (OD) after absorbance reading at 492 nm. (#1, #2: nonhuman primates administered saline at birth and AAV at 4 months of age; #3: nonhuman primate administered AAV at birth and at 4 months of age.) Fig 4. PMID: 26333349



	First Injection (Week 0)	Second Injection (Week 4)
Group 1	AAV1.OVA	AAV8.OVA
Group 2	AAV1.OVA	AAV8.OVA.miR142BS
Group 3	AAV1.OVA.miR142BS	AAV8.OVA
Group 4	AAV1.OVA.miR142BS	AAV8.OVA.miR142BS

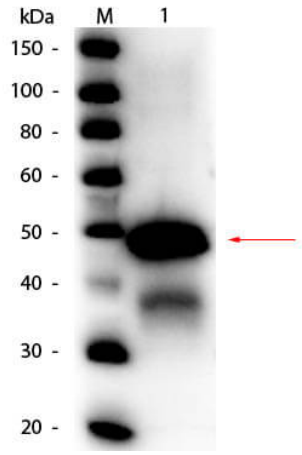
ELISA

Timeline for the AAV-redosing experiment (A) and the description of the rAAV serotype and OVA transgene specific for each injection (B). C57BL/6 male mice, 6 weeks old, were injected i.m. with either rAAV1.OVA or rAAV1.OVA.142BS (1 × 1011 GCs/mouse). The same mice were then redosed with either rAAV8.OVA or rAAV8.OVA.142BS (1 × 1011 GCs/mouse) i.m. 4 weeks after the first injection (n = 5). (C and D) ELISA quantification of circulating OVA expression (C) and anti-OVA IgG (D) in vector-injected mice. Sera were collected throughout a 12-week period. Box plots with whiskers correspond to mean ± SD and maximum and minimum values. P values were determined by ANOVA with Tukey's post hoc test for pairwise comparison. Asterisks (*) denote test of significance between injection groups 1 and 3, and hashes (#) denote test of significance between injection groups 2 and 4. P values for longitudinal comparisons were determined by repeated measures with 2-way ANOVA. Daggers (†) denote test of significance. *,#P < 0.05, **,##P < 0.01, ***,###,†††P < 0.001. Fig 4. PMID: 31112525

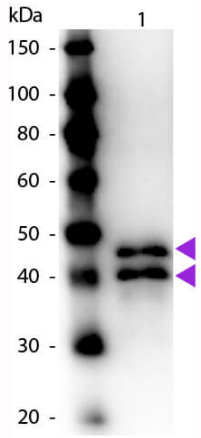


ELISA

Incorporation of miR-223BSs and miR-652BSs boosts in vivo OVA production and suppresses antibody development. (A) Endogenous miRNA expression levels in cultured mouse myoblasts (C2C12), myocytes (dC2C12), macrophages (RAW264.7), DCs (JAWSII), bone marrow derived macrophages (BMDM), primary mouse hepatocytes, and Kupffer cells as quantified by reverse transcription quantitative PCR (RT-qPCR) (n = 3). rAAV1 expression vectors were injected by i.m. on day 0 followed by serum collection every week for an eight-week period. (B, C) ELISA quantification of circulating OVA expression (B) and anti-OVA IgG1 (C) (1 × 1011 GCs/mouse, n = 10). Single gradient heat map representing respective analyte levels (n = 5). (D–F) ddPCR detection of rAAV vector genome copies in injected skeletal muscle (D), spleen (E), and liver (F) at eight weeks post-injection (n = 5). Values represent mean ±SD. *p < 0.05, ***p < 0.001, one-way ANOVA with Tukey's post hoc test. Fig 2.
PMID: 33995418



Western Blot
Western Blot of Rabbit anti-Ovalbumin Peroxidase Conjugated Antibody. Lane 1: Ovalbumin (Hen Egg). Load: 50 ng per lane. Primary antibody: Rabbit anti-Ovalbumin Peroxidase Conjugated Antibody at 1:1,000 overnight at 4°C. Secondary antibody: none Block: MB-070 for 30 min at RT. Predicted/Observed size: 43 kDa, 43 kDa for Ovalbumin. Other band(s): Ovalbumin splice variants and isoforms.



Western Blot
Western Blot of Rabbit anti-Ovalbumin Peroxidase Conjugated Antibody. Lane 1: Ovalbumin. Lane 2: None. Load: 50 ng per lane. Primary antibody: Rabbit anti-Ovalbumin Peroxidase Conjugated Antibody at 1:1,000 overnight at 4°C. Secondary antibody: none Block: MB-070 for 30 min at RT. Predicted/Observed size: 43 kDa, 43 kDa for Ovalbumin. Other band(s): Ovalbumin splice variants and isoforms.

References

- Rana J et al. B cell focused transient immune suppression protocol for efficient AAV readministration to the liver. *Mol Ther Methods Clin Dev.* (2024)
- Muhuri M et al. Novel Combinatorial MicroRNA-Binding Sites in AAV Vectors Synergistically Diminish Antigen Presentation and Transgene Immunity for Efficient and Stable Transduction. *Front Immunol.* (2021)
- Xiao Y et al. Circumventing cellular immunity by miR142-mediated regulation sufficiently supports rAAV-delivered OVA expression without activating humoral immunity. *JCI Insight.* (2019)
- Tai et al. Development of operational immunologic tolerance with neonatal gene transfer in nonhuman primates: preliminary studies. *Gene Therapy* (2015)

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