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Datasheet for 200-1641S

Aldolase Antibody Biotin Conjugated

Overview

Description:	Anti-Aldolase (Rabbit Muscle) (GOAT) Antibody Biotin Conjugated - 200-1641S
Item No.:	200-1641S
Size:	25 µL
Applications:	ELISA, IP, WB
Reactivity:	Human, Rabbit
Host Species:	Goat

Product Details

Background:	Part of the class I fructose-bisphosphate aldolase family, the Anti-Aldolase antibody is essential in the processes glycolysis and gluconeogenesis, as well as performing the role of a scaffolding protein. Anti-Aldolase antibody is ideal for investigators interested in Metabolism, Cancer, and Signal Transduction research.
Synonyms:	goat anti-Aldolase Antibody, biotin conjugated goat anti-Aldolase Antibody, Fructose-bisphosphate aldolase A, Muscle-type aldolase
Host Species:	Goat
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ALDOA
Reactivity:	Human, Rabbit
Immunogen Type:	Native Protein
Immunogen:	Aldolase [Rabbit Muscle]

Purity/Specificity:	Anti-Aldolase 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-Biotin, anti-Goat Serum as well as purified and partially purified Aldolase [Rabbit Muscle]. Cross reactivity against Aldolase from other sources may occur but have not been specifically determined.
Relevant Links:	• UniProtKB - P00883 • NCBI - NP_001075707.1 • GeneID - 100009055

Application Details

Tested Applications:	ELISA, IP, WB
Application Note:	Anti-Aldolase Biotin has been tested by ELISA, immunoprecipitation, and western blot. This product is assayed against 1.0 ug of Aldolase in a standard capture ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:4,000 to 1:16,000 of the reconstitution concentration is suggested for this product.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:1,000 - 1:4,000
IP:	1:100
WB:	1:500 - 1:5,000

Formulation

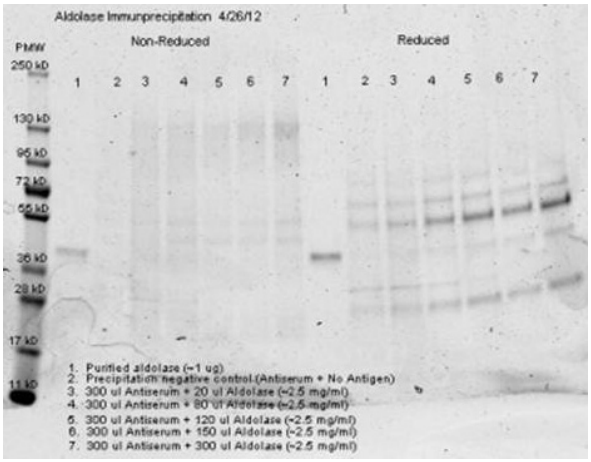
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Shipping & Handling

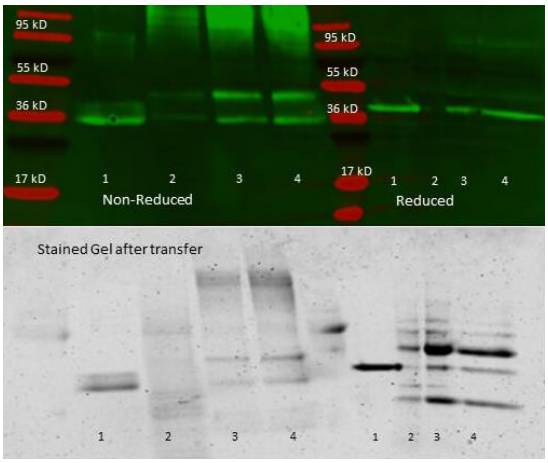
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunoprecipitation
Anti aldolase antibody– Immunoprecipitation- Immunoprecipitation was performed with 300 ul of anti aldolase antiserum and an equal volume of varied amounts (diluted from a stock solution of ~2.5 mg/ml) of purified aldolase in PBS. Antibody/Antigen mixture was incubated ~24 hrs at 4°C, centrifuged for 6 minutes at 13K RPM, washed once with PBS, centrifuged and dissolved in 60 ul 0.1 N NaOH. 90 ul of PBS was added, the sample was divided in 2 portions, and an equal volume of reducing (+4% BME) or non-reducing 2X sample buffer was added. The reduced samples were boiled for five minutes, and all samples were run at 140 V for ~45 minutes on a 4-20% tris/glycine gradient gel. Gel was stained, destained and imaged(see attached) using standard protocols. Precipitation of aldolase was confirmed by comparison of increasing amounts of antigen with the control protein by SDS PAGE and observation of a 40-45 kD MW band corresponding to Aldolase. Additional higher and lower molecular weight bands correspond to serum proteins.



Western Blot

Anti aldolase antibody – Immunoprecipitation and Western Blot. 300 µl aliquots of whole anti-aldolase antiserum (100-1141) were used to precipitate varying amounts of purified aldolase and precipitates with controls were compared by SDS-PAGE and Western blot. Samples shown in the image are: 1. Purified aldolase 2. 300 µl antiserum with no antigen (negative control) 3. 300 µl antiserum with ~100 µl aldolase (2.5 mg/ml) 4. 300 µl antiserum with ~200 µl aldolase (2.5 mg/ml) For the precipitation, 300 ul of antiserum and an equal volume of aldolase antigen in PBS was incubated ~24 hrs at 4°C, centrifuged for 6 minutes at 13K RPM, washed once with PBS, centrifuged and dissolved in 60 ul 0.1 N NaOH. 90 ul of PBS was added, the sample was divided in 2 portions, and an equal volume of reducing (+4% BME) or non-reducing 2X sample buffer was added. The reduced samples were boiled for five minutes, and all samples were run at 140 V for ~45 minutes on a 4-20% tris/glycine gradient gel. Gel was stained, destained and imaged(see attached) using standard protocols.

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