Datasheet for ABIN94900

anti-Aldolase antibody

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Overview

Quantity:	2 mL
Target:	Aldolase (ALD)
Reactivity:	Rabbit
Host:	Goat
Clonality:	Polyclonal
Conjugate:	This Aldolase antibody is un-conjugated
Application:	ELISA

Product Details

Immunogen:	Aldolase [Rabbit Muscle] Immunogentype:Native
Characteristics:	Concentration Definition: by Refractometry

Target Details

Target:	Aldolase (ALD)
Alternative Name:	Aldolase (ALD Products)
Background:	Synonyms: Fructose-bisphosphate aldolase A Muscle-type aldolase
Gene ID:	100009055
UniProt:	P00883

Application Details

Application Notes:	This product has been assayed against 1.0 µg of Aldolase [Rabbit Muscle] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Goat IgG [H&L] Rabbit) (ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) as a substrate for 30 minutes at room temperature. A working dilution of 1:3,000 to 1:12,000 of the reconstitution concentration is suggested for this product. Use approximately 5 ul of antibody to immunoprecipitate 50 ul of protein lysate.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Restore with deionized water (or equivalent)
Concentration:	90 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C

Publications

Product cited in:	Muñoz, Beltrán-Alzate, Duthie, Serrano-Coll, Cardona-Castro: "Comparison of Enzyme-Linked Immunosorbent Assay Using Either Natural Octyl Disaccharide-Leprosy IDRI Diagnostic or Phenolic Glycolipid-I Antigens for the Detection of Leprosy Patients in Colombia." in: **The American journal of tropical medicine and hygiene**, Vol. 98, Issue 1, pp. 274-277, (2018) (PubMed).

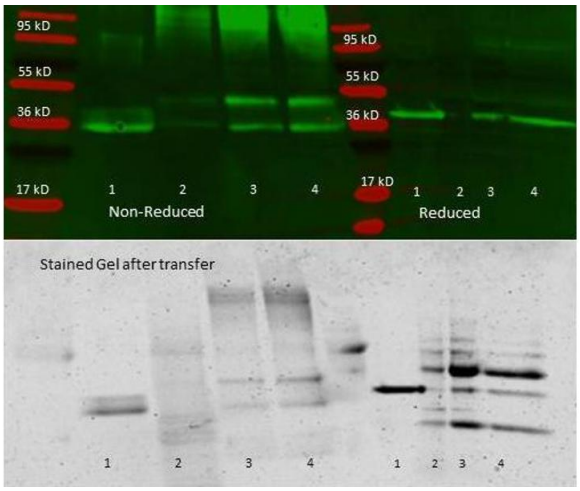
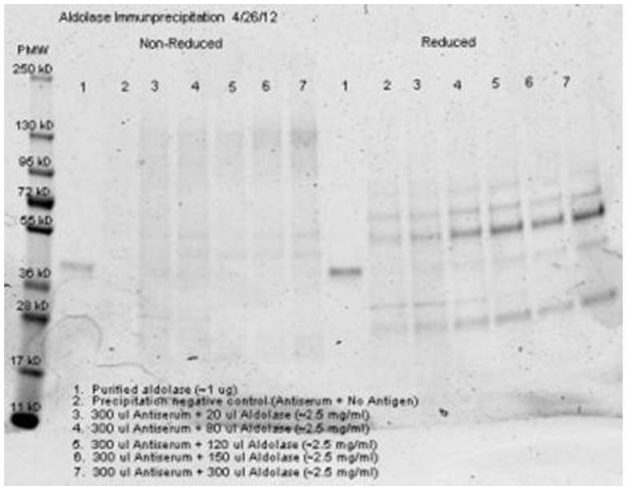


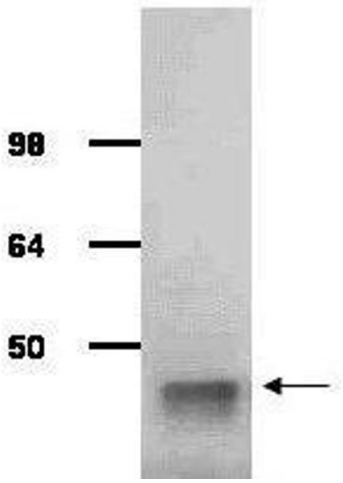
Image 1. Anti aldolase antibody – immunoprecipitation and western blot. 300 µl aliquots of whole anti-aldolase antiserum () were used to precipitate varying amounts of purified aldolase and precipitates with controls were compared by SDS-PAGE and Western blot. Samples shown in the image are: 1. Purified 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. 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.



Immunoprecipitation

Image 2. Immunoprecipitation of rabbit anti Aldolase antiserum – Immunoprecipitation performed with 300 ul of antiserum and an equal volume of varied amounts of purified aldolase diluted from a stock solution of ~2.5 mg/ml 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 Blotting

Image 3. IgG purified antibody to rabbit muscle aldolase (, 200-1141 and 200-1341) was used at a 1:1000 dilution to detect human aldolase by Western blot. A whole cell lysate prepared from human derived A293 cells was loaded on a 4-12% tris glycine gradient gel for SDS-PAGE. The gel was transferred to nitro-cellulose using standard techniques. Antibody reaction with the membrane occurred overnight at 4° C in TTBS supplemented with 2% non-fat dry milk. Color was allowed to develop using SuperSignal West Pico Chemiluminescent Substrate (PIERCE). Other detection methods will yield similar results. This antibody clearly detects a band at ~41 kDa consistent with human aldolase.