Anti-ALDOLASE (GOAT) Antibody - 100-1141

Code: 100-1141 **Size:** 2 mL

Product Description: Anti-ALDOLASE (GOAT) Antibody - 100-1141

Concentration: 90 mg/mL by Refractometry

PhysicalState: Lyophilized

Label	Unconjugated
Host	Goat
Gene Name	ALDOA
Species Reactivity	rabbit, human
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Reconstitution Volume	2.0 mL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
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.
Synonyms	goat anti-Aldolase Antibody, Fructose-bisphosphate aldolase A, Muscle-type aldolase
Application Note	Anti-Aldolase 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) code #605-4302 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 1:3,000 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.
Background	Aldolase plays a key role in glycolysis and gluconeogenesis. In addition, it may also function as scaffolding protein. In vertebrates, three forms of this ubiquitous glycolytic enzyme are found, aldolase A in muscle, aldolase B in the liver, and aldolase C in the brain. Alkylation of Arg-43 inactivates the enzyme. Aldolase is involved in step 4 of the subpathway that synthesizes D-glyceraldehyde 3-phosphate and glycerone phosphate from D-glucose.
Purity And Specificity	This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-goat serum, purified and partially purified Aldolase [Rabbit Muscle]. This antibody will detect human Aldolase. Cross reactivity against Aldolase from other tissues and species may also occur. It has been reported that this antibody can detect human Aldolase on immunoblot showing a 41 kDa band in lysates from MCF7, NMB231 and HBL100 cell lines.
Assay Dilutions	User Optimized
ELISA	1:5,000 - 1:20,000
Western Blot	1:500 - 1:5,000
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	Aldolase [Rabbit Muscle]
General Reference	Zaman et al., (1999) J. Neurosci 19 (22):9821-9830
Related Products	

605-703-125	Anti-GOAT IgG (H&L) (DONKEY) Antibody Peroxidase Conjugated (Min X Ch GP Ham Hs Ms Rb & Rt Serum Proteins) - 605-703-125

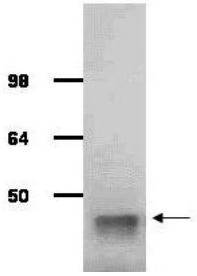
605-743-125	Anti-GOAT IgG (H&L) (DONKEY) Antibody DyLight™ 649 Conjugated (Min X Ch GP Ham Hs Ms Rb & Rt Serum Proteins) - 605-743-125
B304	NORMAL GOAT SERUM (NGS) - B304
MB-070	Blocking Buffer for Fluorescent Western Blotting - MB-070

Related Links

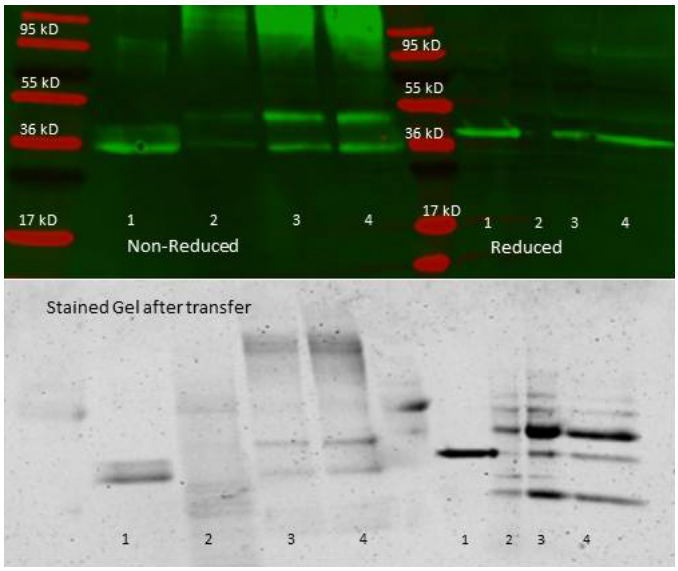
	UniProtKB - P00883
http://www.uniprot.org/uniprot/P00883	
NCBI - P00883.2	http://www.ncbi.nlm.nih.gov/protein/P00883.2
	GeneID - 100009055

Images

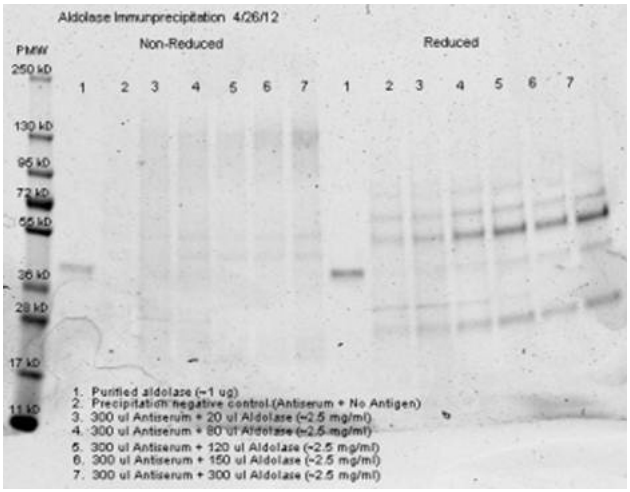
1 IgG purified antibody to rabbit muscle aldolase (100-1141, 200-1141 and 200-1341) was used at a 1:1000 dilution to detect human aldolase by Western blot. A whole cell lysate prepared from human derived A293 cells was loaded on a 4-12% tris glycine gradient gel for SDS-PAGE. The gel was transferred 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.



2 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. 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.



3	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.



Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.