

Datasheet for 200-1341-0100**Aldolase Antibody Peroxidase Conjugated****Overview**

Description:	Anti-Aldolase (Rabbit Muscle) (GOAT) Antibody Peroxidase Conjugated - 200-1341-0100
Item No.:	200-1341-0100
Size:	100 µg
Applications:	ELISA, IP, WB
Reactivity:	Human, Rabbit
Host Species:	Goat

Product Details

Background:	Aldolase is an enzyme that performs an aldol reaction (creating an aldol) or its reverse (cleaving an aldol). Aldolase plays a key role in glycolysis and gluconeogenesis. In addition, may also function as scaffolding protein. Belongs to the class I fructose-bisphosphate aldolase family.
Synonyms:	goat anti-Aldolase Antibody, HRP conjugated goat anti-Aldolase Antibody, Fructose-bisphosphate aldolase A, Muscle-type aldolase, peroxidase Aldolase
Host Species:	Goat
Conjugate:	Peroxidase (HRP)
Clonality:	Polyclonal
Format:	IgG

Target Details

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

Purity/Specificity: 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-Peroxidase, anti-Goat Serum as well as purified and partially purified Aldolase [Rabbit Muscle].

Relevant Links:

- [UniProtKB - P00883](#)
- [NCBI - NP_001075707.1](#)
- [GeneID - 100009055](#)

Application Details

Tested Applications: ELISA, IP, WB

Application Note: Anti-Aldolase has been tested by ELISA, immunoprecipitation, and western blot. This product is assayed against 1.0 µg of Aldolase [Rabbit Muscle] in a standard capture ELISA using ABTS (2,2'-azino-bis-[3-ethylbenzothiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:1,000 to 1:2,000 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 - 1:5,000

IP: 1:100

WB: 1:500 - 1:5,000

Formulation

Physical State: Lyophilized

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) Gentamicin Sulfate. Do NOT add Sodium Azide!

Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Reconstitution Volume: 100 µL

Reconstitution Buffer: Restore with deionized water (or equivalent)

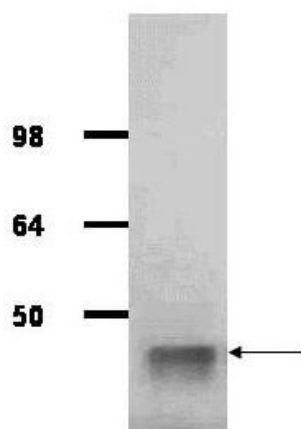
Shipping & Handling

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.

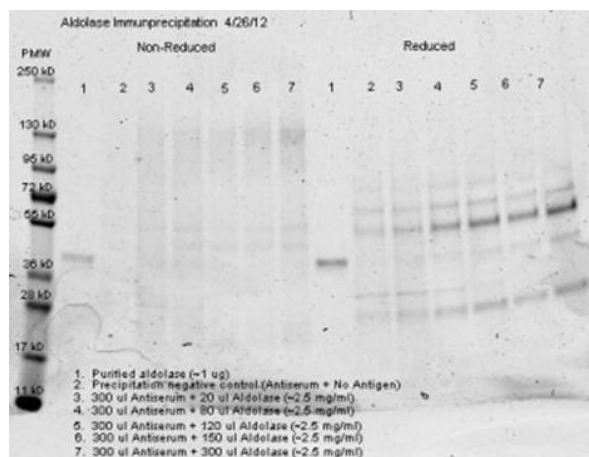
Expiration: Expiration date is one (1) year from date of receipt.

Images



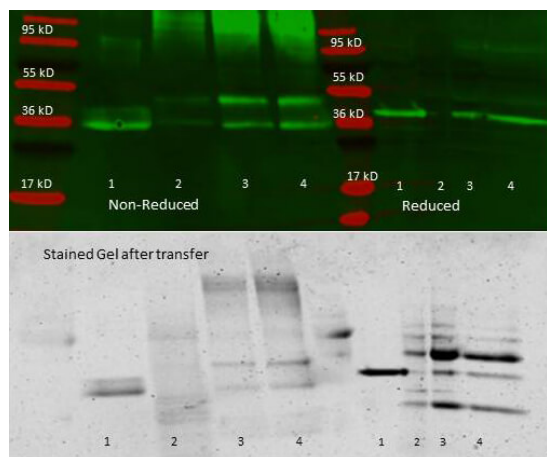
Western Blot

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.



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 μ l 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 μ l antiserum with no antigen (negative control) 3. 300 μ l antiserum with $\sim$ 100 μ l aldolase (2.5 mg/ml) 4. 300 μ l antiserum with $\sim$ 200 μ l aldolase (2.5 mg/ml) For the precipitation, 300 μ l of antiserum and an equal volume of aldolase antigen in PBS was incubated $\sim$ 24 hrs at 4°C, centrifuged for 6 minutes at 13K RPM, washed once with PBS, centrifuged and dissolved in 60 μ l 0.1 N NaOH. 90 μ l 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 $\sim$ 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.