SANTA CRUZ BIOTECHNOLOGY, INC.

Aldolase B (N-20): sc-12062

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Fructose 1,6-bisphosphate Aldolase catalyses the reversible condensation of glycerone-P and glyceraldehyde 3-phosphate into fructose 1,6-bisphosphate. Fructose 1,6-bisphosphate Aldolase exists as three forms, the muscle-specific Aldolase A, the liver-specific Aldolase B, and the brain-specific Aldolase C. Aldolase A, B, and C arose from a common ancestral gene, from which Aldolase B first diverged. Aldolase A is one of the most highly conserved enzymes known, with only about 2% of the residues changing per 100 million years. Aldolase B is regulated by the hormones Insulin and glucagon and has been implicated in hereditary fructose intolerance disease. Aldolase C is a polypeptide that is exclusively expressed in Purkinje cells. Aldolase C-positive Purkinje cells are organized in the cerebellum as stripes or bands that run from anterior to posterior across the cerebellum and alternate with bands of Aldolase C-negative Purkinje cells.

CHROMOSOMAL LOCATION

Genetic locus: ALDOB (human) mapping to 9q31.1; Aldob (mouse) mapping to 4 B1.

SOURCE

Aldolase B (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Aldolase B of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12062 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Aldolase B (N-20) is recommended for detection of aldolase B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Aldolase B (N-20) is also recommended for detection of aldolase B in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Aldolase B siRNA (h): sc-29666, Aldolase B siRNA (m): sc-29667, Aldolase B shRNA Plasmid (h): sc-29666-SH, Aldolase B shRNA Plasmid (m): sc-29667-SH, Aldolase B shRNA (h) Lentiviral Particles: sc-29666-V and Aldolase B shRNA (m) Lentiviral Particles: sc-29667-V.

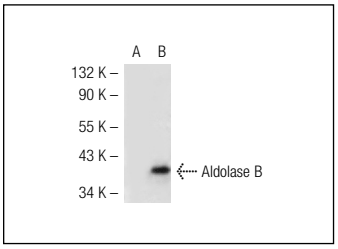
Molecular Weight of Aldolase B: 40 kDa.

Positive Controls: mouse kidney extract: sc-2255, RAW 264.7 whole cell lysate: sc-2211 or Aldolase B (m15): 293T Lysate: sc-124952.

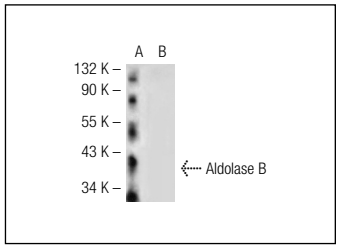
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/ 2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Aldolase B (N-20): sc-12062. Western blot analysis of Aldolase B expression in non-transfected: sc-117752 (**A**) and mouse Aldolase B transfected: sc-124952 (**B**) 293T whole cell lysates.



Aldolase B (N-20): sc-12062. Western blot analysis of Aldolase B expression in non-transfected: sc-117752 (**A**) and mouse Aldolase B transfected: sc-124946 (**B**) 293T whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **Aldolase B (C-11): sc-393278** or **Aldolase B (19): sc-130303**, our highly recommended monoclonal alternatives to Aldolase B (N-20).