# SANTA CRUZ BIOTECHNOLOGY, INC.

# Aldolase B (H-50): sc-30083



#### 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 (H-50) is a rabbit polyclonal antibody raised against amino acids 315-364 mapping at the C-terminus of Aldolase B of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

Aldolase B (H-50) 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  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (H-50) is also recommended for detection of Aldolase B in additional species, including equine, canine, bovine and porcine.

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.

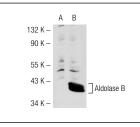
Molecular Weight of Aldolase B: 40 kDa.

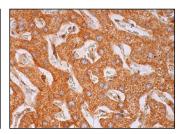
Positive Controls: mouse kidney extract: sc-2255, RAW 264.7 whole cell lysate: sc-2211 or Aldolase B (m13): 293T Lysate: sc-124950.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

### DATA





Aldolase B (H-50): sc-30083. Western blot analysis of Aldolase B expression in non-transfected: sc-117752 (**A**) and mouse Aldolase B transfected: sc-124950 (**B**) 293T whole cell lysates. Aldolase B (H-50): sc-30083. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes.

## **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 Satisfation Guaranteed

Try Aldolase B (C-11): sc-393278 or Aldolase B (19): sc-130303, our highly recommended monoclonal alternatives to Aldolase B (H-50).