

Aldolase A (1F8): sc-53933

BACKGROUND

Fructose 1,6-bisphosphate aldolase catalyses the reversible condensation of glyceraldehyde-3-phosphate and dihydroxyacetone 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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ALDOA (human) mapping to 16p11.2; Aldoa (mouse) mapping to 7 F3.

SOURCE

Aldolase A (1F8) is a mouse monoclonal antibody raised against full length Aldolase A of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Aldolase A (1F8) is recommended for detection of Aldolase A 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Aldolase A siRNA (h): sc-29664, Aldolase A siRNA (m): sc-29665, Aldolase A shRNA Plasmid (h): sc-29664-SH, Aldolase A shRNA Plasmid (m): sc-29665-SH, Aldolase A shRNA (h) Lentiviral Particles: sc-29664-V and Aldolase A shRNA (m) Lentiviral Particles: sc-29665-V.

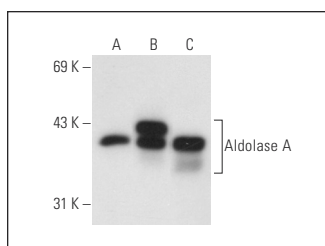
Molecular Weight of Aldolase A: 40 kDa.

Positive Controls: Aldolase A (h2): 293T Lysate: sc-170532, HeLa whole cell lysate: sc-2200 or A-673 cell lysate: sc-2414.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Aldolase A (1F8): sc-53933. Western blot analysis of Aldolase A expression in non-transfected 293T: sc-117752 (A), human Aldolase A transfected 293T: sc-170532 (B) and A-673 (C) 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.

PROTOCOLS

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