Aldolase C (H-11): sc-271593

**BACKGROUND**

Fructose 1,6-bisphosphate aldolase catalyses the reversible condensation of glycero-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.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ALDOC (human) mapping to 17q11.2; Aldoc (mouse) mapping to 11 B5.

**SOURCE**

Aldolase C (H-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 77-112 within an internal region of Aldolase C of human origin.

**PRODUCT**

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

Aldolase C (H-11) is available conjugated to agarose (sc-271593 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271593 HRP), 200 µg/ml, for WB, (HICP) and ELISA; to either phycoerythrin (sc-271593 PE), fluorescein (sc-271593 FITC), Alexa Fluor® 488 (sc-271593 AF488), Alexa Fluor® 546 (sc-271593 AF546), Alexa Fluor® 594 (sc-271593 AF594) or Alexa Fluor® 647 (sc-271593 AF647), 200 µg/ml, for WB (RGB), IF, HICP and FCM; and to either Alexa Fluor® 680 (sc-271593 AF680) or Alexa Fluor® 790 (sc-271593 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271593 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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**STORAGE**

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

**APPLICATIONS**

Aldolase C (H-11) is recommended for detection of Aldolase C of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), 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 C (H-11) is also recommended for detection of Aldolase C in additional species, including equine, canine, bovine and porcine.


Molecular Weight of Aldolase C: 40 kDa.

Positive Controls: mouse brain extract: sc-2253, rat cerebellum extract: sc-2398 or RAW 264.7 whole cell lysate: sc-2211.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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