

# Aldolase C (m): 293T Lysate: sc-124961

## 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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3. Caffè, A.R., et al. 1994. Distribution of Purkinje cell-specific zebrin-II/ Aldolase C immunoreactivity in the mouse, rat, rabbit, and human retina. *J. Comp. Neurol.* 348: 291-297.
4. Hawkes, R., et al. 1995. Aldolase C/zebrin II and the regionalization of the cerebellum. *J. Mol. Neurosci.* 6: 147-158.
5. Lannoo, M.J., et al. 1997. A search for primitive Purkinje cells: zebrin II expression in sea lampreys (*Petromyzon marinus*). *Neurosci. Lett.* 237: 53-55.
6. Walther, E.U., et al. 1998. Genomic sequences of Aldolase C (zebrin II) direct lacZ expression exclusively in non-neuronal cells of transgenic mice. *Proc. Natl. Acad. Sci. USA* 95: 2615-2620.
7. Dehnes, Y., et al. 1998. The glutamate transporter EAAT4 in rat cerebellar Purkinje cells: a glutamate-gated chloride channel concentrated near the synapse in parts of the dendritic membrane facing astroglia. *J. Neurosci.* 18: 3606-3619.

## CHROMOSOMAL LOCATION

Genetic locus: Aldoc (mouse) mapping to 11 B5.

## PRODUCT

Aldolase C (m): 293T Lysate represents a lysate of mouse Aldolase C transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

Aldolase C (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Aldolase C antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.