

## Mouse monoclonal antibody to Aldolase C [4A9]: IgG

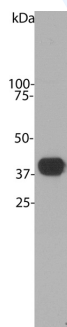
<b>Catalogue No.:</b>	M-1693-100
<b>Description:</b>	Aldolases are glycolytic enzyme that catalyzes the reversible aldol cleavage of fructose 1,6-bisphosphate and fructose-1-phosphate to dihydroxyacetone phosphate and either glyceraldehyde 3-phosphate or glyceraldehyde, respectively. Three aldolase isozymes are found in mammals specifically aldolases A, B, and C, each of which is encoded by a separate gene. Aldolase A is generally considered to be a muscle enzyme. Northern analysis of cultured cells suggests that it is present in both neurons and glia (1). Aldolase B is considered to be a liver-specific enzyme and it is transcriptionally activated by signals from hormones and dietary factors (2). In the adult, aldolase C is the brain-specific isozyme, with low but detectable activity in fetal tissues (1, 3-6). Aldolase C shares 81% amino acid identity with aldolase A and 70% identity with aldolase B. Earlier studies using isozyme-specific antibodies report its location in gray matter astrocytes and cells of the pia mater (5, 8). In situ hybridization of mouse central nervous system using isozyme-specific probes revealed that aldolase A and C are expressed in complementary cell types: aldolase A mRNA is found in neurons; aldolase C message is detected in astrocytes, some cells of the pia mater, and Purkinje cells (9). Aldolase C can in some situations be used as an astrocyte marker. However Purkinje cells of the cerebellum contain high levels of the enzyme, so the enzyme is not totally astrocyte specific.
<b>Unit size:</b>	100 ug
<b>Antigen:</b>	N-terminal 20 amino acids of aldolase C protein.
<b>Antibody Type:</b>	Monoclonal
<b>Isotype:</b>	IgG1
<b>Produced in:</b>	Mouse
<b>Applications:</b>	Western Blotting (WB) and Immunocytochemistry (IC). A dilution of 1:1,000 - 1:2,000 is recommended for WB. A dilution of 1:500 - 1:1,000 is recommended for IC. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
<b>Specificity:</b>	The antibody reacts with a 40 kDa band by Western blot on a crude bovine cerebellum homogenate. It has also been used successfully for immunocytochemistry.
<b>Species Against:</b>	Human, rat, mouse, cow, pig.
<b>Antibody Against:</b>	Aldolase C
<b>Form:</b>	Lyophilised. The antibody has been purified from tissue culture supernatant.
<b>Appearance:</b>	Lyophilised
<b>Reconstitution:</b>	Reconstitute in sterile distilled water. Centrifuge to remove any insoluble material.
<b>Storage:</b>	After reconstitution of lyophilised antibody, aliquot and store at -20C for a higher stability. Avoid freeze-thaw cycles.
<b>Expiry Date:</b>	12 months after purchase
<b>General References:</b>	1. Popovici T, Berwald-Netter Y, Vibert M, Kahn A, Skala H. Localization of aldolase C mRNA in brain cells. FEBS Lett. 268, 189-193 (1990).

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Crude bovine cerebellum homogenate. The antibody recognizes the 40 kDa protein.

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