

Datasheet for ABIN1580409
anti-ALDOC antibody (C-Term)[Go to Product page](#)

2 Images

Overview

Quantity:	100 µL
Target:	ALDOC
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat, Cow, Pig, Mammalian
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Clone:	1A1
Isotype:	IgG1
Purification:	affinity purified antibody

Target Details

Target:	ALDOC
Alternative Name:	Aldolase C (ALDOC Products)
Background:	Aldolases are glycolytic enzymes that catalyze 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

Target Details

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. Aldolase B is considered to be a liver-specific enzyme and it is transcriptionally activated by signals from hormones and dietary factors. In the adult, aldolase C is the brain-specific isozyme, with low but detectable activity in fetal tissues. 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. 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. 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. MCA-1A1 was raised against C-terminal 23 amino acids of the human aldolase C protein, the sequence is KYEGSGEDGGAAAQSLYIANHAY. The HGNC name for this protein is ALDOC.

Application Details

Application Notes:	The antibody solution can be used at dilutions 1:1,000-2,000 for immunofluorescence. For western blots try at 1:2,000-5,000. A suitable control tissue is brain cell lysates.
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Restrictions:	For Research Use only
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Handling

Format:	Liquid
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Concentration:	1 mg/mL
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Preservative:	Sodium azide
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Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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Handling Advice:	Avoid repeated freezing and thawing.
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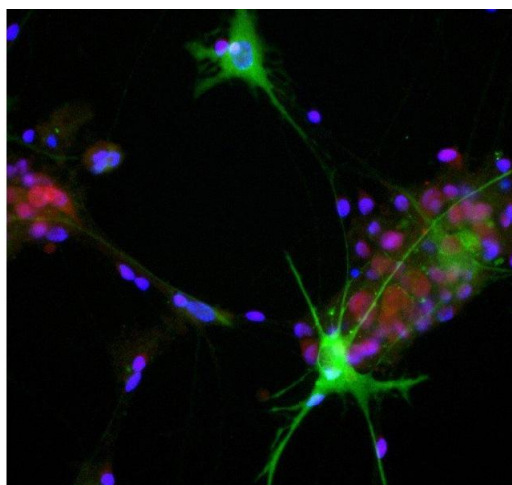
Storage:	4 °C/-20 °C
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Storage Comment:	Store at 4°C short term or -20°C long term.
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Western Blotting

Image 1. Blots of crude rat brain lysates blotted with ABIN1580409. The ABIN1580409 monoclonal binds strongly and cleanly to a band at about 40 kDa.



Immunofluorescence

Image 2. View of mixed neuron/glia cultures stained with ABIN1580409 (green) and our rabbit antibody to NeuN/FOX3 antibody (RPCA-FOX3, red). ABIN1580409 antibody reveals strong cytoplasmic staining in astrocytes, while Rabbit Fox3/NeuN antibody shows nuclear and distal cytoplasmic staining in neuron cells and is complete absence of astrocytes. Blue is a DNA stain.