

ARG10695
anti-Aldolase C antibody [4A9]Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [4A9] recognizes Aldolase C
Tested Reactivity	Hu, Ms, Rat, Cow, Hrs, Pig
Predict Reactivity	Chk
Tested Application	ICC/IF, IHC-Fr, WB
Host	Mouse
Clonality	Monoclonal
Clone	4A9
Isotype	IgG1
Target Name	Aldolase C
Immunogen	N-terminal sequence MPHSYPALSAEQKKELSDIA
Conjugation	Un-conjugated
Alternate Names	EC 4.1.2.13; Brain-type aldolase; Fructose-bisphosphate aldolase C; ALDC

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:500 - 1:1000
	IHC-Fr	1:500 - 1:1000
	WB	1:1000

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

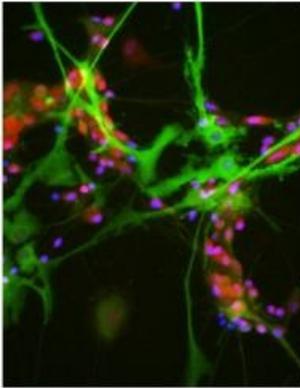
Properties

Form	Liquid
Purification	Affinity purification.
Buffer	PBS and 50% Glycerol.
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

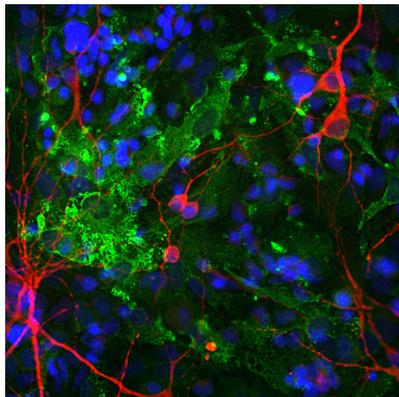
Gene Symbol	ALDOC
Gene Full Name	aldolase C, fructose-bisphosphate
Background	This gene encodes a member of the class I fructose-biphosphate aldolase gene family. Expressed specifically in the hippocampus and Purkinje cells of the brain, the encoded protein is a glycolytic enzyme that catalyzes the reversible aldol cleavage of fructose-1,6-biphosphate and fructose 1-phosphate to dihydroxyacetone phosphate and either glyceraldehyde-3-phosphate or glyceraldehyde, respectively. [provided by RefSeq, Jul 2008]
Calculated Mw	39 kDa

Images



ARG10695 anti-Aldolase C antibody [4A9] ICC/IF image

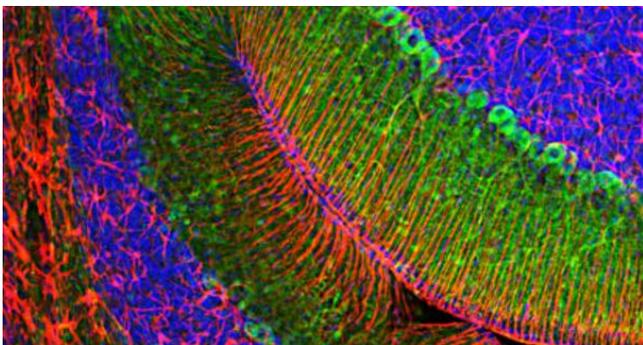
Immunocytochemistry: Rat mixed neuron / glial cultures stained with ARG10695 anti-Aldolase C antibody [4A9] (green) and co-stained with our rabbit antibody to FOX3 / NeuN (red). ARG10695 anti-Aldolase C antibody [4A9] antibody reveals strong cytoplasmic staining in astrocytes, while Rabbit FOX3 / NeuN antibody shows nuclear and distal cytoplasmic staining in neuron cells and is complete absence of astrocytes. Blue is a DNA stain.



ARG10695 anti-Aldolase C antibody [4A9] ICC/IF image

Immunofluorescence: Cortical neuron-glia cells from E20 Rat stained with ARG10695 anti-Aldolase C antibody [4A9] (green) at 1:1000 dilution and costained with [ARG52328](#) anti-MAP2 antibody (red) at 1:10000 dilution. Hoechst (blue) for nuclear staining.

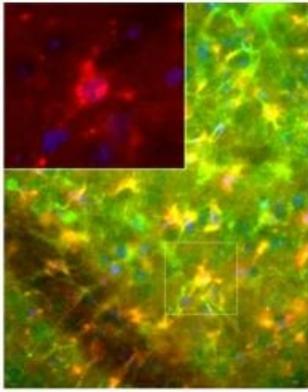
The Aldolase C antibody labels cytosolic protein expressed in the glial cells, while the MAP2 antibody stains dendrites and perikarya of mature neurons.



ARG10695 anti-Aldolase C antibody [4A9] IHC-Fr image

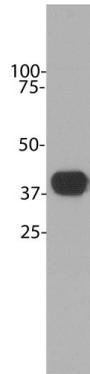
Immunohistochemistry: Frozen section of Rat cerebellum stained with ARG10695 anti-Aldolase C antibody [4A9] (green) at 1:1000 dilution and costained with [ARG52312](#) anti-GFAP antibody (red) at 1:5000 dilution. Hoechst (blue) for nuclear staining.

Aldolase C antibody selectively labels the perikarya and dendrites of Purkinje cells, while GFAP antibody stains processes of Bergman glia and astrocytic cells.



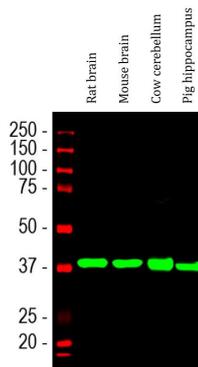
ARG10695 anti-Aldolase C antibody [4A9] IHC-Fr image

Immunohistochemistry: Frozen sections of Mouse brain (fixed by transcardial perfusion with 4% paraformaldehyde) stained with ARG10695 anti-Aldolase C antibody [4A9] (red) and co-stained with chicken anti-Vimentin antibody (green). In the striatum, ARG10695 anti-Aldolase C antibody [4A9] positive astrocytes are highly co-stained with Vimentin antibody, which results in yellow to gold colors. Insets show a higher magnification picture. Nuclei are labeled with DAPI (blue).



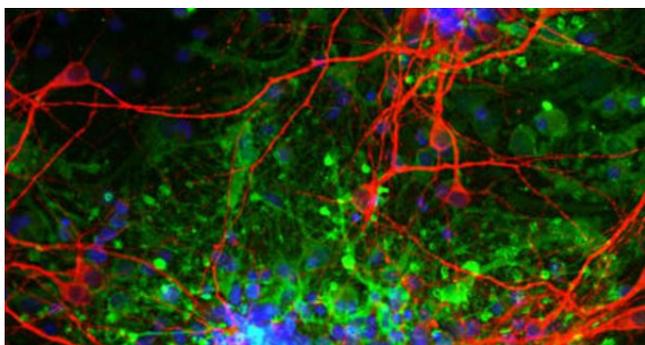
ARG10695 anti-Aldolase C antibody [4A9] WB image

Western blot: Crude cow cerebellum homogenate stained with ARG10695 anti-Aldolase C antibody [4A9]. Other studies show that this antibody does not recognize the very closely related molecules aldolase A or B.



ARG10695 anti-Aldolase C antibody [4A9] WB image

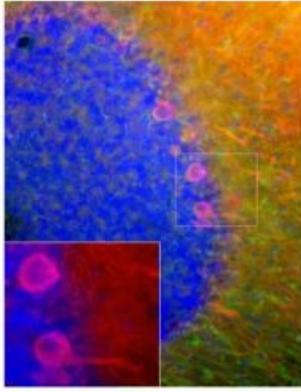
Western blot: Rat brain, Mouse brain, Cow cerebellum and Pig hippocampus lysates stained with ARG10695 anti-Aldolase C antibody [4A9] (green) at 1:2000 dilution.



ARG10695 anti-Aldolase C antibody [4A9] IHC-Fr image

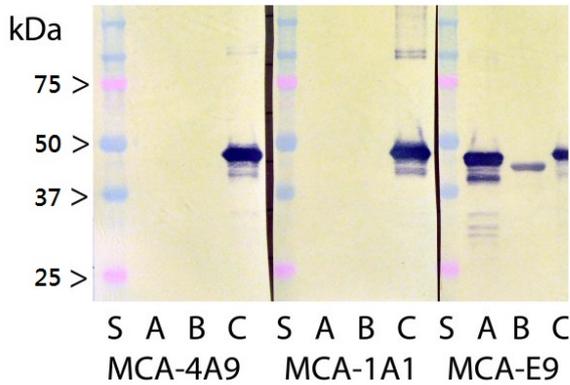
Immunohistochemistry: Frozen section of E20 Rat cortical tissue stained with ARG10695 anti-Aldolase C antibody [4A9] (green) at 1:1000 dilution and costained with [ARG52328](#) anti-MAP2 antibody (red) at 1:10000 dilution.

The aldolase C antibody labels cytosolic protein expressed in glial cells, while MAP2 antibody stains dendrites and perikarya of mature neurons.



ARG10695 anti-Aldolase C antibody [4A9] IHC-Fr image

Immunohistochemistry: Frozen sections of Mouse brain (fixed by transcardial perfusion with 4% paraformaldehyde) stained with ARG10695 anti-Aldolase C antibody [4A9] (red) and co-stained with chicken anti-Vimentin antibody (green). In the cerebellum, ARG10695 anti-Aldolase C antibody [4A9] positive Purkinje cells do not express vimentin, which results in red color. Insets show a higher magnification picture. Nuclei are labeled with DAPI (blue).



ARG10695 anti-Aldolase C antibody [4A9] WB image

Western blot: Recombinant Human Aldolase A, B and C with three monoclonal antibodies as indicated showing binding to all three gene products. Lane labelled S show molecular weight standards, while lanes A, B and C contain recombinant full length His-tagged Human Aldolase A, B and C respectively. The epitope for ARG10695 anti-Aldolase C antibody [4A9] is within the N-terminal peptide of the molecule which is less conserved between the three Aldolases. Clone 1A1 binds to the C-terminal peptide and also is specific for Aldolase C, while clone E9 binds to the less conserved core of the molecule and recognizes all three Aldolase C gene products.