

Mouse anti-Human ALDH5A1 Monoclonal Antibody | anti-ALDH5A1 antibody

ALDH5A1 antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA48209	Mouse	Human	Immunofluorescence, Immunocytochemistry, Flow Cytometry, Functional Assay, Western Blot, ELISA

PRODUCT SYNONYMS

ALDH5A1; Monoclonal Antibody; ALDH5A1 antibody; Succinate-semialdehyde dehydrogenase mitochondrial; SSADH; SSDH; Succinate-semialdehyde dehydrogenase; mitochondrial; anti-ALDH5A1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2a, k
Clone Number	AT17F5
Purity/Purification	By protein-A affinity chromatography
Form/Format	Liquid. In phosphate-buffered saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol.
Concentration	1 mg/ml (varies by lot)
Sequence Length	535
Applicable Applications for anti-ALDH5A1 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), FCM/FACS (Flow Cytometry), WB (Western Blot), ELISA
Antigen Species	Human
Immunogen	Recombinant human ALDH5A1 (48-535aa) purified from E. coli
Clone Note	Anti-human ALDH5A1 mAb, clone AT17F5, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human ALDH5A1 protein.
Preparation and Storage	Can be stored at 4 degree C. For long term storage, aliquot and store at -20 degree C. Avoid repeated freezing and thawing cycles.

IMAGES



IF (Immunofluorescence)

ICC/IF analysis of ALDH5A1 in 293T cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human ALDH5A1 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



WB (Western Blot)

The HepG2 cell lysate (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ALDH5A1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. The mouse liver tissue extract (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ALDH5A1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

ADDITIONAL INFORMATION

Related Product Information for anti-ALDH5A1 antibody	This protein belongs to the aldehyde dehydrogenase family of proteins. This gene encodes a mitochondrial NAD+-dependent succinic semialdehyde dehydrogenase. A deficiency of this enzyme, known as 4-hydroxybutyricaciduria, is a rare inborn error in the metabolism of the neurotransmitter gamma-aminobutyric acid (GABA). In response to the defect, physiologic fluids from patients accumulate GHB, a compound with numerous neuromodulatory properties. Two transcript variants encoding distinct isoforms have been identified for this gene.
Product Categories/Family for anti-ALDH5A1 antibody	Neuroscience
References	Chambliss KL., et al. (1995) The Journal of Biological Chemistry. 270 (1): 461-7.; Trettel F., et al. (1997) Advances in Experimental Medicine and Biology. 414: 253-60.; Kim YG., et al. (2009) EMBO J. 8;28 (7): 959-68.;

NCBI AND UNIPROT INFORMATION

NCBI GI #	4507229
NCBI GeneID	7915
NCBI Accession #	NP_001071
NCBI GenBank Nucleotide #	NM_001080.3
UniProt Accession #	P51649; Q546H9; Q8N3W6; B2RD26; G5E949
Molecular Weight	58,653 Da
NCBI Official Full Name	succinate-semialdehyde dehydrogenase, mitochondrial isoform 2
NCBI Official Synonym Full Names	aldehyde dehydrogenase 5 family member A1
NCBI Official Symbol	ALDH5A1
NCBI Official Synonym Symbols	SSDH; SSADH
NCBI Protein Information	succinate-semialdehyde dehydrogenase, mitochondrial
UniProt Protein Name	Succinate-semialdehyde dehydrogenase, mitochondrial
UniProt Gene Name	ALDH5A1
UniProt Synonym Gene Names	SSADH

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.