

Product datasheet for **CF809478**

ADH5 Mouse Monoclonal Antibody [Clone ID: OTI5G4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI5G4
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 1-266 of human ADH5 (NP_000662) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	alcohol dehydrogenase 5 (class III), chi polypeptide
Database Link:	NP_000662 Entrez Gene 11532 Mouse Entrez Gene 100145871 Rat Entrez Gene 128 Human P11766

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Background:

This gene encodes a member of the alcohol dehydrogenase family. Members of this family metabolize a wide variety of substrates, including ethanol, retinol, other aliphatic alcohols, hydroxysteroids, and lipid peroxidation products. The encoded protein forms a homodimer. It has virtually no activity for ethanol oxidation, but exhibits high activity for oxidation of long-chain primary alcohols and for oxidation of S-hydroxymethyl-glutathione, a spontaneous adduct between formaldehyde and glutathione. This enzyme is an important component of cellular metabolism for the elimination of formaldehyde, a potent irritant and sensitizing agent that causes lacrymation, rhinitis, pharyngitis, and contact dermatitis. The human genome contains several non-transcribed pseudogenes related to this gene. [provided by RefSeq, Oct 2008]

Synonyms:

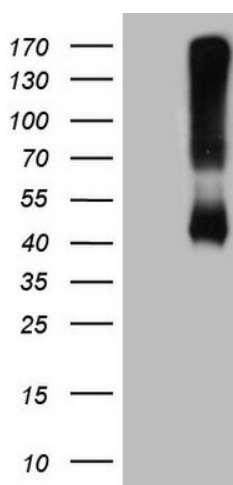
ADH-3; ADHX; AMEDS; BMFS7; FALDH; FDH; GSH-FDH; GSNOR; HEL-S-60p

Protein Families:

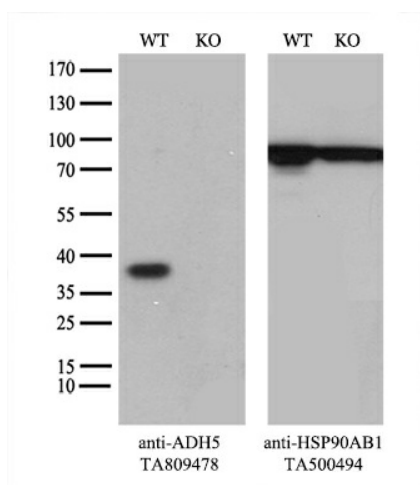
Druggable Genome

Protein Pathways:

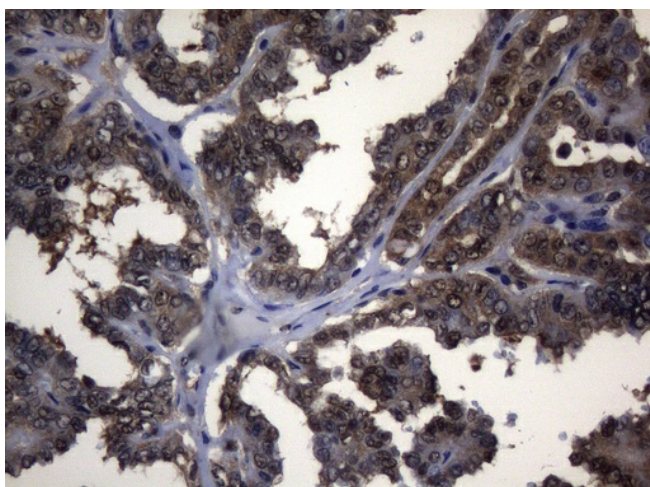
Drug metabolism - cytochrome P450, Fatty acid metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Methane metabolism, Retinol metabolism, Tyrosine metabolism

Product images:


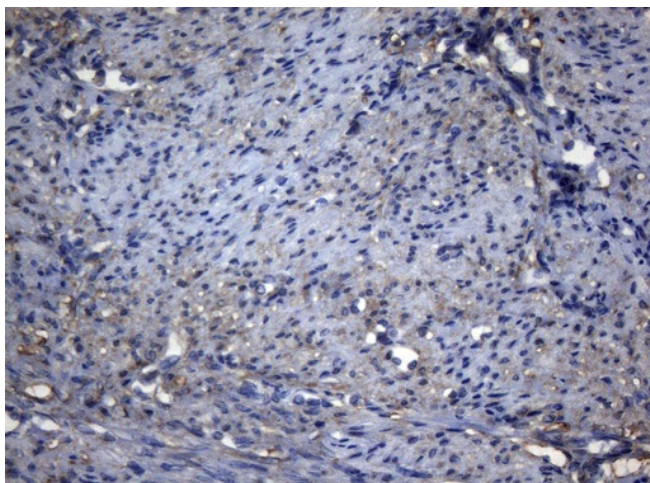
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ADH5 ([RC204903], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ADH5 (1:2000). Positive lysates [LY400220] (100ug) and [LC400220] (20ug) can be purchased separately from OriGene.



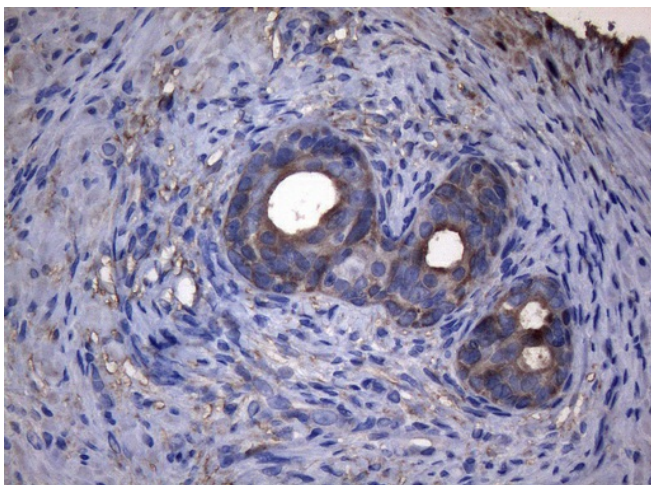
Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and ADH5-Knockout HeLa cells (KO, Cat# [LC832449]) were separated by SDS-PAGE and immunoblotted with anti-ADH5 monoclonal antibody [TA809478] (1:500^{*}). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.



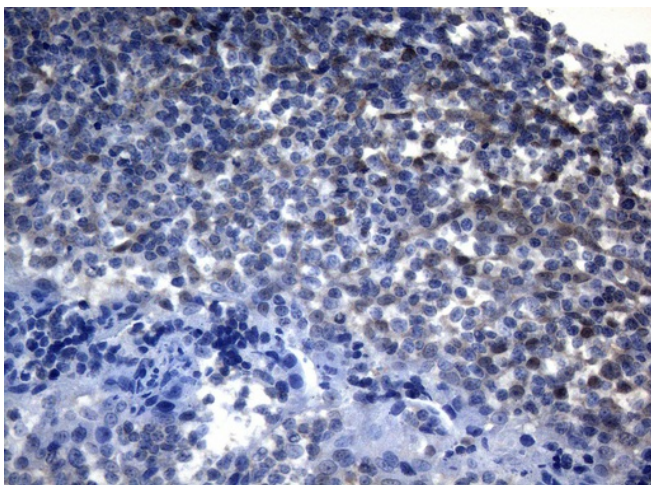
Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-ADH5 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human endometrium tissue within the normal limits using anti-ADH5 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-ADH5 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-ADH5 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.