

Product datasheet for CF809482

OriGene Technologies, Inc.

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ADH5 Mouse Monoclonal Antibody [Clone ID: OTI4D4]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI4D4

Applications: IHC, WB

Recommended Dilution: 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 MouseEntrez Gene 100145871 RatEntrez Gene 128 Human

P11766





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; GSH-FDH; GSNOR; HEL-S-60p

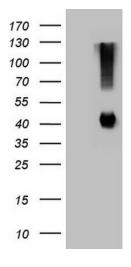
Protein Families: Druggable Genome

Protein Pathways: Drug metabolism - cytochrome P450, Fatty acid metabolism, Glycolysis / Gluconeogenesis,

Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Methane metabolism,

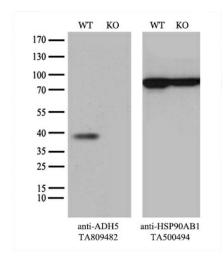
Retinol metabolism, Tyrosine metabolism

Product images:

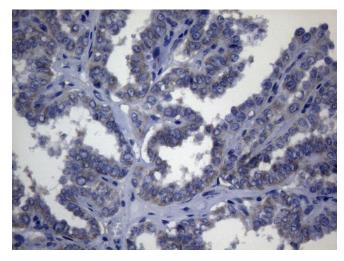


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ADH5 (Cat# [RC204903], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ADH5(Cat# [TA809482]). Positive lysates [LY400220] (100ug) and [LC400220] (20ug) can be purchased separately from OriGene.

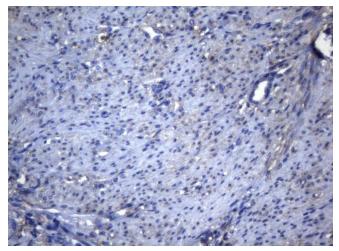




Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and ADH5-Knockout HeLa cells (KO, Cat# [LC832449]) were separated by SDS-PAGE and immunoblotted with anti-ADH5 monoclonal antibody [TA809482] (1:500`). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.

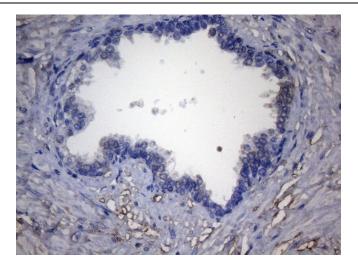


Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-ADH5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA809482]) (1:150)

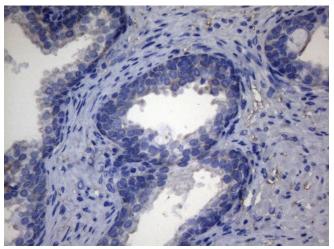


Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-ADH5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA809482]) (1:150)





Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-ADH5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA809482]) (1:150)



Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-ADH5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA809482]) (1:150)