

#### OriGene Technologies, Inc.

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# **Product datasheet for TA809478**

## **ADH5 Mouse Monoclonal Antibody [Clone ID: OTI5G4]**

### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI5G4
Applications: IHC, WB

Recommend Dilution: WB 1:2000, IHC 1:150

Reactivity: Human
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:** PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

**Gene Name:** alcohol dehydrogenase 5 (class III), chi polypeptide

Database Link: NP 000662 Entrez Gene 128 Human

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

**Protein Families:** Druggable Genome

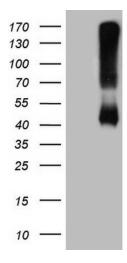


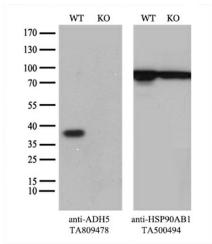


**Protein Pathways:** 

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:**

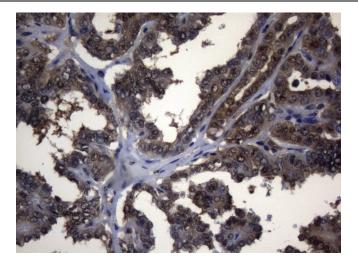




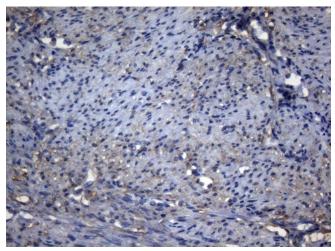
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ADH5 ([RC204903], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ADH5 (1:2000). Positive lysates [LY400220] (100ug)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

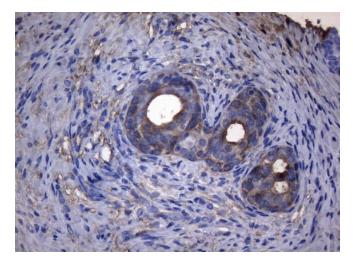




Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-ADH5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA809478) (1:150)

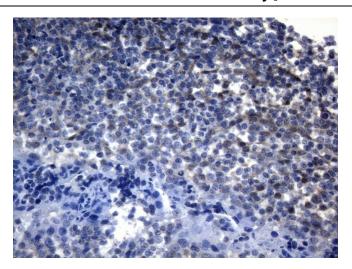


Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-ADH5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA809478) (1:150)



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, TA809478) (1:150)





Immunohistochemical staining of paraffinembedded Human tonsil 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, TA809478) (1:150)