

# ADH4 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ADH4. Catalog # AT1054a

## **Specification**

# ADH4 Antibody (monoclonal) (M01) - Product Information

**Application** WB, E **Primary Accession** P08319 Other Accession NM 000670 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 Kappa Calculated MW 40222

## ADH4 Antibody (monoclonal) (M01) - Additional Information

#### Gene ID 127

#### **Other Names**

Alcohol dehydrogenase 4, Alcohol dehydrogenase class II pi chain, ADH4

## Target/Specificity

ADH4 (NP\_000661, 52 a.a.  $\sim$  150 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

# **Dilution**

WB~~1:500~1000

E~~N/A

#### **Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2.

#### Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

#### **Precautions**

ADH4 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

#### ADH4 Antibody (monoclonal) (M01) - Protocols

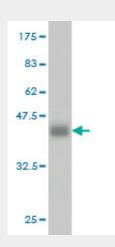
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

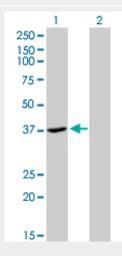


- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# ADH4 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa).

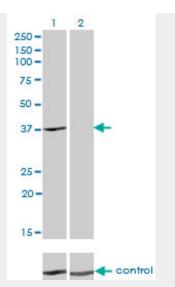


Western Blot analysis of ADH4 expression in transfected 293T cell line by ADH4 monoclonal antibody (M01), clone 3C5.

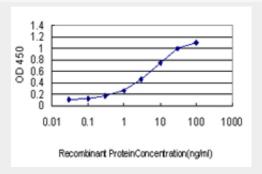
Lane 1: ADH4 transfected lysate(40.2 KDa).

Lane 2: Non-transfected lysate.





Western blot analysis of ADH4 over-expressed 293 cell line, cotransfected with ADH4 Validated Chimera RNAi ( (Cat # AT1054a )



Detection limit for recombinant GST tagged ADH4 is approximately 0.3ng/ml as a capture antibody.

# ADH4 Antibody (monoclonal) (M01) - Background

This gene encodes class II alcohol dehydrogenase 4 pi subunit, which is a member of the alcohol dehydrogenase family. Members of this enzyme family metabolize a wide variety of substrates, including ethanol, retinol, other aliphatic alcohols, hydroxysteroids, and lipid peroxidation products. Class II alcohol dehydrogenase is a homodimer composed of 2 pi subunits. It exhibits a high activity for oxidation of long-chain aliphatic alcohols and aromatic alcohols and is less sensitive to pyrazole. This gene is localized to chromosome 4 in the cluster of alcohol dehydrogenase genes.

# ADH4 Antibody (monoclonal) (M01) - References

Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891. Association of ADH4 genetic variants with alcohol dependence risk and related phenotypes: results from a larger multicenter association study. Preuss UW, et al. Addict Biol, 2010 Jul 9. PMID 20626721. A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000. Identification of a FOXA-dependent enhancer of human alcohol dehydrogenase 4 (ADH4). Pochareddy S, et al. Gene, 2010 Jul 15. PMID 20363298. Cluster headache is associated with the alcohol dehydrogenase 4 (ADH4) gene. Rainero I, et al. Headache, 2010 Jan. PMID 19925625.