



## Rabbit Anti-ADH5 antibody

SL12448R

|                               |  |
|-------------------------------|--|
| <b>Product Name:</b>          | ADH5   |
| <b>Chinese Name:</b>          | 乙醇脱氢酶5抗体   |
| <b>Alias:</b>                 | ADH 3; ADH5; ADHX; ADHX_HUMAN; Alcohol dehydrogenase (class III) chi polypeptide; alcohol dehydrogenase 5 (class III) chi polypeptide; Alcohol dehydrogenase 5; Alcohol dehydrogenase class 3; Alcohol dehydrogenase class chi chain; Alcohol dehydrogenase class III; Alcohol dehydrogenase class-3; Alcohol dehydrogenase class-III; class III alcohol dehydrogenase 5 chi subunit; FALDH; FDH; formaldehyde dehydrogenase; Glutathione dependent formaldehyde dehydrogenase; Glutathione-dependent formaldehyde dehydrogenase; GSH-FDH; hydroxymethylglutathione dehydrogenase; S-(hydroxymethyl)glutathione dehydrogenase. |
| <b>Organism Species:</b>      | Rabbit   |
| <b>Clonality:</b>             | Polyclonal   |
| <b>React Species:</b>         | Human,Mouse,Rat,   |
| <b>Applications:</b>          | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair)<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user.   |
| <b>Molecular weight:</b>      | 40kDa  |
| <b>Cellular localization:</b> | cytoplasmic  |
| <b>Form:</b>                  | Lyophilized or Liquid  |
| <b>Concentration:</b>         | 1mg/ml   |
| <b>immunogen:</b>             | KLH conjugated synthetic peptide derived from human ADH5:301-374/374   |
| <b>Lsotype:</b>               | IgG  |
| <b>Purification:</b>          | affinity purified by Protein A   |
| <b>Storage Buffer:</b>        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.   |
| <b>Storage:</b>               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.  |
| <b>PubMed:</b>                | <a href="#">PubMed</a>   |

The alcohol dehydrogenase family of proteins metabolize a wide variety of substrates, including retinol, hydroxysteroids, ethanol, aliphatic alcohols and lipid peroxidation products. ADH5 (alcohol dehydrogenase 5 (class III)), also known as FDH (formaldehyde dehydrogenase), ADHX, ADH-3 or GSNOR, is a 374 amino acid cytoplasmic protein that belongs to the class III subfamily of alcohol dehydrogenases. Expressed ubiquitously, ADH5 uses iron as a cofactor to catalytically oxidize both long-chain primary alcohols and S-hydroxymethyl-glutathione, a product formed spontaneously between formaldehyde and glutathione. ADH5 exists as a homodimer and, via its ability to oxidize S-hydroxymethyl-glutathione and, thus, eliminate formaldehyde, functions as an important component of cellular metabolism. Genetic variations in the gene encoding ADH5 may affect drug and alcohol dependence in humans.

**Function:**

Class-III ADH is remarkably ineffective in oxidizing ethanol, but it readily catalyzes the oxidation of long-chain primary alcohols and the oxidation of S-(hydroxymethyl) glutathione.

**Subunit:**

Homodimer.

**Subcellular Location:**

Cytoplasm.

**Similarity:**

Belongs to the zinc-containing alcohol dehydrogenase family. Class-III subfamily.

**SWISS:**

P11766

**Gene ID:**

128

**Database links:**

[Entrez Gene: 128](#)Human

[Entrez Gene: 11532](#)Mouse

[Entrez Gene: 100145871](#)Rat

[Omim: 103710](#)Human

[SwissProt: P11766](#)Human

[SwissProt: P28474](#)Mouse

**Product Detail:**

[SwissProt: P12711](#)Rat

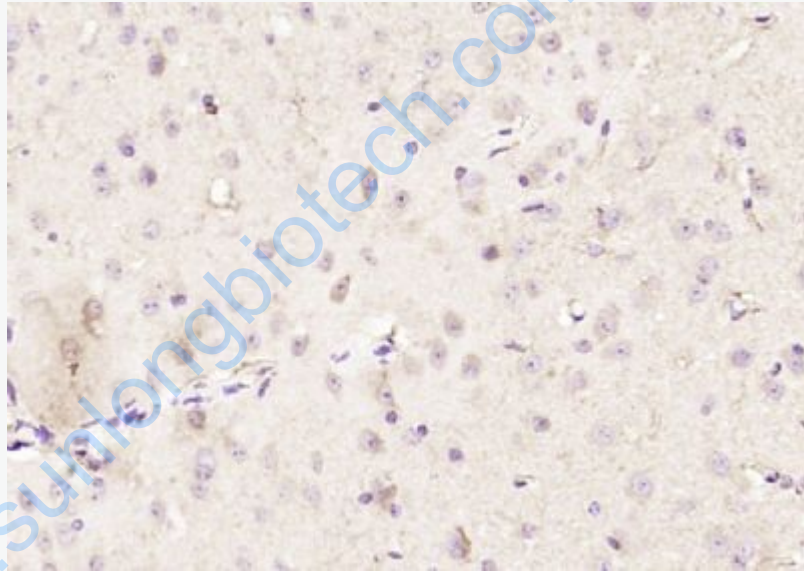
[Unigene: 78989](#)Human

[Unigene: 3874](#)Mouse

[Unigene: 222115](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ADH5) Polyclonal Antibody, Unconjugated (SL12448R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.