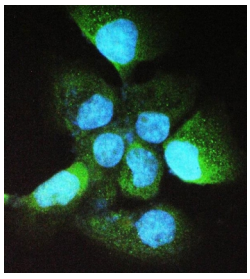
ADH5 Antibody (R32485)

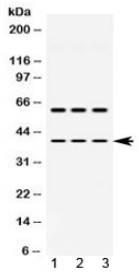
Catalog No.	Formulation	Size
R32485	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

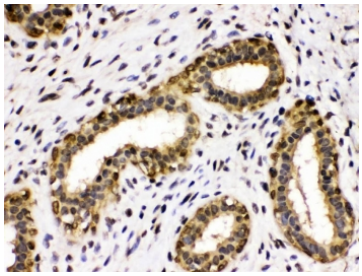
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P11766
Localization	Cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Immunofluorescence : 2-4ug/ml
Limitations	This ADH5 antibody is available for research use only.



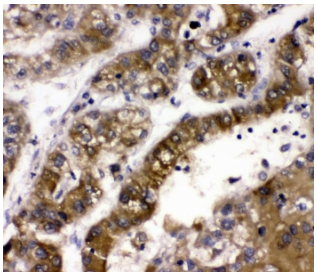
Immunofluorescent staining of FFPE human A431 cells with ADH5 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



Western blot testing of 1) rat brain, 2) mouse brain and 3) human HepG2 lysate with ADH5 antibody at 0.5ug/ml. Predicted molecular weight ~40 kDa.



IHC staining of FFPE human breast cancer with ADH5 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



IHC staining of FFPE human liver cancer with ADH5 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.

Description

Alcohol dehydrogenase class-3, also called Alcohol dehydrogenase 5, is an enzyme that in humans is encoded by the ADH5 gene. 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.

Application Notes

Differences in protocols and secondary/substrate sensitivity may require the ADH5 antibody to be titrated for optimal performance.

Immunogen

Amino acids K212-I374 from the human protein were used as the immunogen for the ADH5 antibody.

Storage

After reconstitution, the ADH5 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.