

CYP46A1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CYP46A1. Catalog # AT1705a

Specification

CYP46A1 Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, E <u>O9Y6A2</u> <u>NM_006668</u> Human mouse Monoclonal IgG1 Kappa 56821

CYP46A1 Antibody (monoclonal) (M01) - Additional Information

Gene ID 10858

Other Names Cholesterol 24-hydroxylase, CH24H, Cytochrome P450 46A1, CYP46A1, CYP46

Target/Specificity CYP46A1 (NP_006659, 201 a.a. ~ 300 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 CYP46A1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

CYP46A1 Antibody (monoclonal) (M01) - Protocols

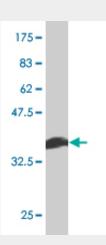
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot

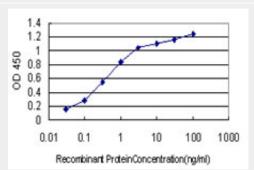


- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CYP46A1 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa).



Detection limit for recombinant GST tagged CYP46A1 is approximately 0.03ng/ml as a capture antibody.

CYP46A1 Antibody (monoclonal) (M01) - Background

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This endoplasmic reticulum protein is expressed in the brain, where it converts cholesterol to 24S-hydroxycholesterol. While cholesterol cannot pass the blood-brain barrier, 24S-hydroxycholesterol can be secreted in the brain into the circulation to be returned to the liver for catabolism.

CYP46A1 Antibody (monoclonal) (M01) - References

A Pilot Study of Gene/Gene and Gene/Environment Interactions in Alzheimer Disease. Ghebranious N, et al. Clin Med Res, 2010 Aug 3. PMID 20682755.Capillary cerebral amyloid angiopathy identifies a distinct APOE epsilon4-associated subtype of sporadic Alzheimer's disease. Thal DR, et al. Acta Neuropathol, 2010 Aug. PMID 20535486.Increased expression of cholesterol 24S-hydroxylase results in disruption of glial glutamate transporter EAAT2 association with lipid rafts: a potential role in Alzheimer's disease. Tian G, et al. J Neurochem, 2010 May. PMID 20193040.A CYP46 T/C SNP modulates parahippocampal and hippocampal morphology in young subjects. H?nggi J, et al.



Neurobiol Aging, 2009 Jul 31. PMID 19647891.Primary open-angle glaucoma: association with cholesterol 24S-hydroxylase (CYP46A1) gene polymorphism and plasma 24-hydroxycholesterol levels. Fourgeux C, et al. Invest Ophthalmol Vis Sci, 2009 Dec. PMID 19553612.