

## CYP7B1 Antibody (monoclonal) (M06)

Mouse monoclonal antibody raised against a partial recombinant CYP7B1. Catalog # AT1706a

#### Specification

## CYP7B1 Antibody (monoclonal) (M06) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC, E <u>075881</u> <u>NM\_004820</u> Human mouse Monoclonal IgG2a Kappa 58256

## CYP7B1 Antibody (monoclonal) (M06) - Additional Information

Gene ID 9420

Other Names 25-hydroxycholesterol 7-alpha-hydroxylase, Cytochrome P450 7B1, Oxysterol 7-alpha-hydroxylase, CYP7B1

**Target/Specificity** CYP7B1 (NP\_004811, 203 a.a. ~ 286 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 IHC~~1:100~500 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** CYP7B1 Antibody (monoclonal) (M06) is for research use only and not for use in diagnostic or therapeutic procedures.

### CYP7B1 Antibody (monoclonal) (M06) - Protocols

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

<u>Western Blot</u>



- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## CYP7B1 Antibody (monoclonal) (M06) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (34.98 KDa).



Western Blot analysis of CYP7B1 expression in transfected 293T cell line by CYP7B1 monoclonal antibody (M06), clone 2B11.

Lane 1: CYP7B1 transfected lysate(58.256 KDa). Lane 2: Non-transfected lysate.





Immunoperoxidase of monoclonal antibody to CYP7B1 on formalin-fixed paraffin-embedded human prostate. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged CYP7B1 is approximately 0.3ng/ml as a capture antibody.

# CYP7B1 Antibody (monoclonal) (M06) - 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 membrane protein catalyzes the first reaction in the cholesterol catabolic pathway of extrahepatic tissues, which converts cholesterol to bile acids. This enzyme likely plays a minor role in total bile acid synthesis, but may also be involved in the development of atherosclerosis, neurosteroid metabolism and sex hormone synthesis.

# CYP7B1 Antibody (monoclonal) (M06) - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.CYP7B1-mediated metabolism of 5alpha-androstane-3alpha,17beta-diol (3alpha-Adiol): a novel pathway for potential regulation of the cellular levels of androgens and neurosteroids. Pettersson H, et al. Biochim Biophys Acta, 2009 Dec. PMID 19732851.Genetic susceptibility to distinct bladder cancer subphenotypes. Guey LT, et al. Eur Urol, 2010 Feb. PMID 19692168.CYP7B1: one cytochrome P450, two human genetic diseases, and multiple physiological functions. Stiles AR, et al. J Biol Chem, 2009 Oct 16. PMID 19687010.