

## CYP24A1 Antibody (monoclonal) (M07)

Mouse monoclonal antibody raised against a partial recombinant CYP24A1. Catalog # AT1702a

#### Specification

## CYP24A1 Antibody (monoclonal) (M07) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, E <u>Q07973</u> <u>NM\_000782</u> Human mouse Monoclonal IgG2a Kappa 58875

#### CYP24A1 Antibody (monoclonal) (M07) - Additional Information

Gene ID 1591

**Other Names** 25-dihydroxyvitamin D(3) 24-hydroxylase, mitochondrial, 24-OHase, Vitamin D(3) 24-hydroxylase, Cytochrome P450 24A1, Cytochrome P450-CC24, CYP24A1, CYP24

**Target/Specificity** CYP24A1 (NP\_000773, 415 a.a. ~ 514 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** CYP24A1 Antibody (monoclonal) (M07) is for research use only and not for use in diagnostic or therapeutic procedures.

#### CYP24A1 Antibody (monoclonal) (M07) - Protocols

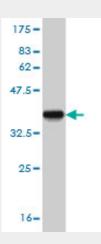
Provided below are standard protocols that you may find useful for product applications.

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

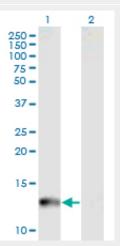


- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CYP24A1 Antibody (monoclonal) (M07) - Images



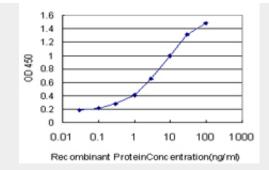
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa).



Western Blot analysis of CYP24A1 expression in transfected 293T cell line by CYP24A1 monoclonal antibody (M07), clone 1F8.

Lane 1: CYP24A1 transfected lysate (Predicted MW: 11.11 KDa). Lane 2: Non-transfected lysate.





Detection limit for recombinant GST tagged CYP24A1 is approximately 0.1ng/ml as a capture antibody.

## CYP24A1 Antibody (monoclonal) (M07) - 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 mitochondrial protein initiates the degradation of 1,25-dihydroxyvitamin D3, the physiologically active form of vitamin D3, by hydroxylation of the side chain. In regulating the level of vitamin D3, this enzyme plays a role in calcium homeostasis and the vitamin D endocrine system. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

# CYP24A1 Antibody (monoclonal) (M07) - References

Vitamin D pathway gene variants and prostate cancer prognosis. Holt SK, et al. Prostate, 2010 Sep 15. PMID 20687218.High-density polymorphisms analysis of 23 candidate genes for association with bone mineral density. Giroux S, et al. Bone, 2010 Jul 30. PMID 20654748.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.Epigenetic regulation of vitamin D 24-hydroxylase/CYP24A1 in human prostate cancer. Luo W, et al. Cancer Res, 2010 Jul 15. PMID 20587525.Common genetic determinants of vitamin D insufficiency: a genome-wide association study. Wang TJ, et al. Lancet, 2010 Jul 17. PMID 20541252.