

CYP24A1 Antibody
Rabbit mAb
Catalog # AP92032**Specification****CYP24A1 Antibody - Product Information**

Application	WB
Primary Accession	Q07973
Clonality	Monoclonal
Other Names	
CP24; CYP24; CYP24A1; HCAI; P450 CC24;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	58875 Da

CYP24A1 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human CYP24A1
Description	Has a role in maintaining calcium homeostasis. Catalyzes the NADPH-dependent 24-hydroxylation of calcidiol (25-hydroxyvitamin D(3)) and calcitriol (1-alpha,25-dihydroxyvitamin D(3)).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

CYP24A1 Antibody - Protein InformationName CYP24A1 ([HGNC:2602](#))

Synonyms CYP24

Function

A cytochrome P450 monooxygenase with a key role in vitamin D catabolism and calcium homeostasis. Via C24- and C23-oxidation pathways, catalyzes the inactivation of both the vitamin D precursor calcidiol (25-hydroxyvitamin D(3)) and the active hormone calcitriol (1-alpha,25-dihydroxyvitamin D(3)) (PubMed: [11012668](http://www.uniprot.org/citations/11012668) target="_blank">11012668, PubMed: [15574355](http://www.uniprot.org/citations/15574355) target="_blank">15574355, PubMed: [16617161](http://www.uniprot.org/citations/16617161) target="_blank">16617161, PubMed: [24893882](http://www.uniprot.org/citations/24893882) target="_blank">24893882, PubMed: [29461981](http://www.uniprot.org/citations/29461981) target="_blank">29461981, PubMed: [8679605](http://www.uniprot.org/citations/8679605) target="_blank">8679605)

target="_blank">8679605). With initial hydroxylation at C-24 (via C24-oxidation pathway), performs a sequential 6-step oxidation of calcitriol leading to the formation of the biliary metabolite calcitroic acid (PubMed:15574355, PubMed:24893882). With initial hydroxylation at C-23 (via C23-oxidation pathway), catalyzes sequential oxidation of calcidiol leading to the formation of 25(OH)D3-26,23-lactone as end product (PubMed:11012668, PubMed:8679605). Preferentially hydroxylates at C-25 other vitamin D active metabolites, such as CYP11A1-derived secosteroids 20S- hydroxycholecalciferol and 20S,23-dihydroxycholecalciferol (PubMed:25727742). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via FDXR/adrenodoxin reductase and FDX1/adrenodoxin (PubMed:8679605).

Cellular Location

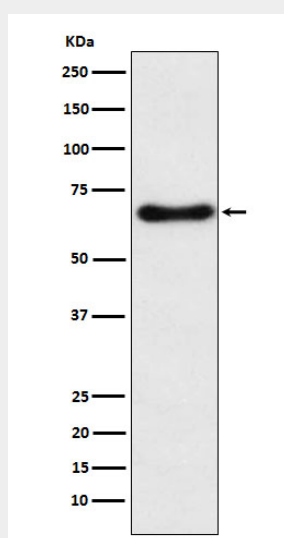
Mitochondrion {ECO:0000250|UniProtKB:Q09128}.

CYP24A1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CYP24A1 Antibody - Images



Western blot analysis of CYP24A1 expression in Human fetal liver lysate.