

Anti-CYP24A1 Rabbit Monoclonal Antibody Catalog # ABO15492

Specification

Anti-CYP24A1 Rabbit Monoclonal Antibody - Product Information

Application	WB
Primary Accession	Q07973
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

Description

Anti-CYP24A1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human.

Anti-CYP24A1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 1591

Other Names

1, 25-dihydroxyvitamin D(3) 24-hydroxylase, mitochondrial, 24-OHase, Vitamin D(3) 24-hydroxylase, 1.14.15.16, Cytochrome P450 24A1, Cytochrome P450-CC24, CYP24A1 ([HGNC:2602](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=2602)), CYP24

Application Details

WB 1:500-1:2000

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human CYP24A1

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-CYP24A1 Rabbit Monoclonal Antibody - Protein Information

Name 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- α ,25-dihydroxyvitamin D(3)) (PubMed: [11012668](http://www.uniprot.org/citations/11012668)), PubMed: [15574355](http://www.uniprot.org/citations/15574355), PubMed: [16617161](http://www.uniprot.org/citations/16617161), PubMed: [24893882](http://www.uniprot.org/citations/24893882), PubMed: [29461981](http://www.uniprot.org/citations/29461981), PubMed: [8679605](http://www.uniprot.org/citations/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 calcitric acid (PubMed: [15574355](http://www.uniprot.org/citations/15574355), PubMed: [24893882](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/11012668), PubMed: [8679605](http://www.uniprot.org/citations/8679605)). Preferentially hydroxylates at C-25 other vitamin D active metabolites, such as CYP11A1-derived secosteroids 20S- hydroxycholecalciferol and 20S,23-dihydroxycholecalciferol (PubMed: [25727742](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/8679605)).

Cellular Location

Mitochondrion {ECO:0000250|UniProtKB:Q09128}.

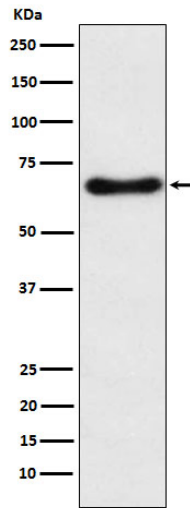
Anti-CYP24A1 Rabbit Monoclonal Antibody - Protocols

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](#)

Anti-CYP24A1 Rabbit Monoclonal Antibody - Images





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