

Recombinant Human CYP24A1, His-tagged

Cat. No. CYP24A1-11768H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CYP24A1 protein, fused to His-tag, was expressed in E.coli and purified by Ni-sepharose.
Species	Human
Source	E.coli
ProteinLength	1-350a.a.
Description	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.
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
Storage Buffer	1M PBS (58mM Na2HPO4, 17mM NaH2PO4, 68mM NaCl, pH8.) added with 300mM Imidazole and 0.7% Sarcosyl, 15% glycerol.

GENE INFORMATION

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene Name	CYP24A1 cytochrome P450, family 24, subfamily A, polypeptide 1 [Homo sapiens]
Official Symbol	CYP24A1
Synonyms	CYP24A1; cytochrome P450, family 24, subfamily A, polypeptide 1; CYP24, cytochrome P450, subfamily XXIV (vitamin D 24 hydroxylase); 1,25-dihydroxyvitamin D(3) 24-hydroxylase, mitochondrial; CP24; P450 CC24; 24-OHase; cytochrome P450 24A1; cytochrome P450-CC24; vitamin D 24-hydroxylase; exo-mitochondrial protein; vitamin D(3) 24-hydroxylase; 1,25-@dihydroxyvitamin D3 24-hydroxylase; cytochrome P450, subfamily XXIV (vitamin D 24-hydroxylase); HCAI; CYP24; P450-CC24; MGC126273; MGC126274;
Gene ID	1591
mRNA Refseq	NM_000782
Protein Refseq	NP_000773
MIM	126065
UniProt ID	Q07973
Chromosome Location	20q13.2-q13.3
Pathway	Biological oxidations, organism-specific biosystem; Cytochrome P450 - arranged by substrate type, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of lipids and lipoproteins, organism-specific biosystem; Metabolism of steroid hormones and vitamins A and D, organism-specific biosystem; Nuclear receptors in lipid metabolism and toxicity, organism-specific biosystem; Phase 1 - Functionalization of compounds, organism-specific biosystem;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Function

1-alpha,25-dihydroxyvitamin D3 24-hydroxylase activity; 25-hydroxycholecalciferol-24-hydroxylase activity; electron carrier activity; heme binding; heme binding; metal ion binding; monooxygenase activity; oxidoreductase activity; oxidoreductase activity,

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA