

Recombinant Human CBR1 protein

Cat. No. CBR1-26326TH Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Human CBR1(1-277aa) was expressed in E. coli.

Species Human

Source E.coli

ProteinLength 1-277 a.a.

Description CBR1(Carbonyl reductase 1) is one of several monomeric NADPH-dependent oxidoreductases having wide specificity for carbonyl compounds. CBR1 is widely distributed in human tissues. CBR1 metabolizes many toxic environmental quinones and pharmacological relevant substrates such as the anticancer doxorubicin. CBR1 can also convert prostaglandin E2 to prostaglandin F2-alpha.

Form Liquid. In 20 mM Tris-HCl buffer (pH 8.5) containing 10% glycerol

Molecular Mass 30 kDa (277aa), confirmed by MALDI-TOF.

AA Sequence

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MSSGIHVALV TGGNKGIGLA IVRDLCRLFS GDVVLTARDV TRGQAAVQQL
QAEGLSPRFH QLDIDDLQSI RALRDFLRKE YGGLDVLVNNAGIAFKVADP
TPFHIAEVT MKTNFFGTRD VCTELLPLIK PQGRVVNVSS IMSVRALKSC
SPELQQKFERS ETITEEELVG LMNKFVEDTKKGVHQKEGWP SSAYGVTKIG
VTVLSRIHAR KLSEQRKGDK ILLNACCPGW VRTDMAGPKA TKSPEEGAET
PVYLALLPPD AEGPHGQFVSEKRVEQW
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Purity	> 95% by SDS - PAGE
Storage	Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.
Concentration	1 mg/ml (determined by Bradford assay)
GENE INFORMATION	
Gene Name	CBR1 carbonyl reductase 1 [Homo sapiens]
Official Symbol	CBR1
Synonyms	CBR1; carbonyl reductase 1; CBR; carbonyl reductase [NADPH] 1; SDR21C1; short chain dehydrogenase/reductase family 21C; member 1; carbonyl reductase (NADPH) 1; prostaglandin 9-ketoreductase; prostaglandin-E(2) 9-reductase; NADPH-dependent carbonyl reductase 1; 15-hydroxyprostaglandin dehydrogenase; short chain dehydrogenase/reductase family 21C, member 1; hCBR1;
Gene ID	873
mRNA Refseq	NM_001757
Protein Refseq	NP_001748
MIM	114830
UniProt ID	P16152
Chromosome	21q22.1

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Location	
Pathway	Arachidonic acid metabolism, organism-specific biosystem; Arachidonic acid metabolism, conserved biosystem; Metabolic pathways, organism-specific biosystem; Metabolism of xenobiotics by cytochrome P450, organism-specific biosystem; Metabolism of xenobiotics by cytochrome P450, conserved biosystem;
Function	15-hydroxyprostaglandin dehydrogenase (NADP+) activity; carbonyl reductase (NADPH) activity; nucleotide binding; oxidoreductase activity; oxidoreductase activity, acting on NADH or NADPH, quinone or similar compound as acceptor; prostaglandin-E2 9-reductase activity;

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