# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-237aa

**UniProt No.** Q8N4T8

NCBI Accession No. AAH21973.1

### **Alternative Names**

Carbonyl reductase family member 4, Carbonyl reductase family member 4, Quinone reductase CBR4, 3-oxoacyl-[acyl-carrier-protein] reductase

## **PRODUCT SPECIFICATION**

### **Molecular Weight**

27.5 kDa (257aa) confirmed by MALDI-TOF

**Concentration** 0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 5mM DTT, 200mM NaCl

**Purity** > 95% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

CBR4 belongs to the short-chain dehydrogenase/reductase family. The formation of heteroteramer with HSD17B8 has NADH-dependent 3-ketoacyl-acyl carrier protein reductase activity for o- and p-quinones. It plays a role in biosynthesis of fatty acids in mitochondria and has broad substrate specificity and reduces 9, 10phenanthrenequinone, 1, 4-benzoquinone and various other o-quinones and p-quinones (in vitro). Recombinant human CBR4 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional



chromatography techniques.

#### **Amino acid Sequence**

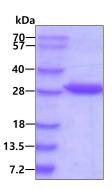
<MGSSHHHHHH SSGLVPRGSH> MDKVCAVFGG SRGIGRAVAQ LMARKGYRLA VIARNLEGAK AAAGDLGGDH LAFSCDVAKE HDVQNTFEEM EKHLGRVNFL VNAAGINRDG LLVRTKTEDM VSQLHTNLLG SMLTCKAAMR TMIQQQGGSI VNVGSIVGLK GNSGQSVYSA SKGGLVGFSR ALAKEVARKK IRVNVVAPGF VHTDMTKDLK EEHLKKNIPL GRFGETIEVA HAVVFLLESP YITGHVLVVD GGLQLIL

### **General References**

Endo S., et al. (2008) Biochem Biophys Res Commun. 26 377(4):1326-30 Chen Z., et al. (2009) FASEB J. 23:3682-3691

## DATA

#### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.