10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# CBR4 Antibody (C-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP17512B**

## Specification

### CBR4 Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB,E** |
| Primary Accession | Q8N4T8 |
| Other Accession | NP_116172.2 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **25301** |
| Antigen Region | **178-205** |

### CBR4 Antibody (C-term) - Additional Information

**Gene ID** 84869

**Other Names**
Carbonyl reductase family member 4, 1---, 3-oxoacyl-[acyl-carrier-protein] reductase, 111-, Quinone reductase CBR4, CBR4

**Target/Specificity**
This CBR4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 178-205 amino acids from the C-terminal region of human CBR4.

**Dilution**
WB~~1:1000
E~~Use at an assay dependent concentration.

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
CBR4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### CBR4 Antibody (C-term) - Protein Information

**Name** CBR4

**Synonyms** SDR45C1

**Function** Component of the heterotetramer complex KAR (3-ketoacyl-[acyl carrier protein] reductase or 3-ketoacyl-[ACP] reductase) that forms part of the mitochondrial fatty acid synthase (mtFAS). Beta-subunit of the KAR heterotetramer complex, responsible for the 3-ketoacyl-ACP reductase activity of the mtFAS, reduces 3-oxoacyl-[ACP] to (3R)- hydroxyacyl-[ACP] in a NADPH-dependent manner with no chain length preference, thereby participating in mitochondrial fatty acid biosynthesis (PubMed:25203508). The homotetramer has NADPH-dependent quinone reductase activity (in vitro), hence could play a role in protection against cytotoxicity of exogenous quinones (PubMed:19000905). As a heterotetramer, it can also reduce 9,10-phenanthrenequinone, 1,4-benzoquinone and various other o-quinones and p-quinones (in vitro) (PubMed:19000905, PubMed:19571038, PubMed:25203508).

**Cellular Location**
Mitochondrion matrix

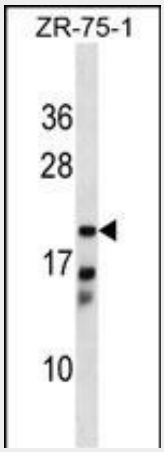
**Tissue Location**
Detected in liver and kidney (at protein level) (PubMed:19000905). Displays the highest expression in neuronal and muscle tissues (PubMed:25203508).

## CBR4 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## CBR4 Antibody (C-term) - Images




CBR4 Antibody (C-term) (Cat. #AP17512b) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the CBR4 antibody detected the CBR4 protein (arrow).

## CBR4 Antibody (C-term) - Background

The heteroteramer with HSD17B8 has NADH-dependent 3-ketoacyl-acyl carrier protein reductase activity. May play a role in biosynthesis of fatty acids in mitochondria. The homotetramer may act as NADPH-dependent quinone reductase. Has broad substrate specificity and reduces 9,10-phenanthrenequinone, 1,4-benzoquinone and various other o-quinones and p-quinones (in vitro).

**CBR4 Antibody (C-term) - References**

Chen, Z., et al. FASEB J. 23(11):3682-3691(2009)
Persson, B., et al. Chem. Biol. Interact. 178 (1-3), 94-98 (2009) :
Endo, S., et al. Biochem. Biophys. Res. Commun. 377(4):1326-1330(2008)
Lamesch, P., et al. Genomics 89(3):307-315(2007)