

CBR4 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP17512b**Specification**

CBR4 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q8N4T8](#)**CBR4 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 84869**Other Names**Carbonyl reductase family member 4, 1---, 3-oxoacyl-[acyl-carrier-protein] reductase, 111-,
Quinone reductase CBR4, CBR4**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CBR4 Antibody (C-term) Blocking Peptide - 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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/19000905), PubMed: [19571038](http://www.uniprot.org/citations/19571038), PubMed: [25203508](http://www.uniprot.org/citations/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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CBR4 Antibody (C-term) Blocking Peptide - Images**CBR4 Antibody (C-term) Blocking Peptide - Background**

The heterotetramer 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) Blocking Peptide - 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)