

CBR1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP7563d**Specification**

CBR1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P16152](#)**CBR1 Antibody (Center) Blocking Peptide - Additional Information**

Gene ID 873

Other Names

Carbonyl reductase [NADPH] 1, 15-hydroxyprostaglandin dehydrogenase [NADP(+)],
NADPH-dependent carbonyl reductase 1, Prostaglandin 9-ketoreductase, Prostaglandin-E(2)
9-reductase, CBR1, CBR, CRN

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7563d](/products/AP7563d) was selected from the Center region of human CBR1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

CBR1 Antibody (Center) Blocking Peptide - Protein InformationName CBR1 ([HGNC:1548](#))

Synonyms CBR, CRN, SDR21C1

Function

NADPH-dependent reductase with broad substrate specificity. Catalyzes the reduction of a wide variety of carbonyl compounds including quinones, prostaglandins, menadione, plus various xenobiotics. Catalyzes the reduction of the antitumor anthracyclines doxorubicin and daunorubicin to the cardiotoxic compounds doxorubicinol and daunorubicinol (PubMed:[18449627](http://www.uniprot.org/citations/18449627), PubMed:[15799708](http://www.uniprot.org/citations/15799708), PubMed:[17912391](http://www.uniprot.org/citations/17912391), PubMed:[7005231](http://www.uniprot.org/citations/7005231)).

href="http://www.uniprot.org/citations/1921984" target="_blank">1921984, PubMed:17344335, PubMed:18826943). Can convert prostaglandin E to prostaglandin F₂-alpha (By similarity). Can bind glutathione, which explains its higher affinity for glutathione- conjugated substrates. Catalyzes the reduction of S-nitrosoglutathione (PubMed:18826943, PubMed:17344335). In addition, participates in the glucocorticoid metabolism by catalyzing the NADPH-dependent cortisol/corticosterone into 20beta-dihydrocortisol (20b-DHF) or 20beta-corticosterone (20b-DHB), which are weak agonists of NR3C1 and NR3C2 in adipose tissue (PubMed:28878267).

Cellular Location

Cytoplasm.

Tissue Location

Expressed in kidney (at protein level).

CBR1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CBR1 Antibody (Center) Blocking Peptide - Images**CBR1 Antibody (Center) Blocking Peptide - Background**

Carbonyl reductase 1 (CBR1) is one of several monomeric, NADPH-dependent oxidoreductases having wide specificity for carbonyl compounds. This enzyme is widely distributed in human tissues.

CBR1 Antibody (Center) Blocking Peptide - References

Colombe, L., Exp. Dermatol. 16 (9), 762-769 (2007) Lakhman, S.S., Mol. Pharmacol. 72 (3), 734-743 (2007) Gonzalez-Covarrubias, V., Drug Metab. Dispos. 35 (6), 973-980 (2007)