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

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

Specification

CBR1 Antibody (Center) Blocking Peptide - Product Information

Primary 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 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 Information

Name 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:15799708, PubMed:17344335, PubMed:17912391, PubMed:18449627, PubMed:<a

href="http://www.uniprot.org/citations/18826943" target="_blank">18826943, PubMed:1921984, PubMed:7005231). 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:17344335, PubMed:18826943). 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)