

CBR1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51049

Specification

CBR1 Antibody - Product Information

Application	WB, ICC, IHC-P, E
Primary Accession	P16152
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	30 KDa

CBR1 Antibody - 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

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

CBR1 Antibody - 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: 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 - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CBR1 Antibody - Images

CBR1 Antibody - Background

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. Can convert prostaglandin E2 to prostaglandin F2-alpha. Can bind glutathione, which explains its higher affinity for glutathione-conjugated substrates. Catalyzes the reduction of S-nitrosoglutathione.

CBR1 Antibody - References

Wermuth B., et al. J. Biol. Chem. 263:16185-16188(1988).
Forrest G.L., et al. Biochim. Biophys. Acta 1048:149-155(1990).
Forrest G.L., et al. Mol. Pharmacol. 40:502-507(1991).
Watanabe K., et al. Genomics 52:95-100(1998).
Terada T., et al. Submitted (OCT-2003) to the EMBL/GenBank/DDBJ databases.