

CBR1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52770

Specification

CBR1 Antibody - Product Information

Application	WB, ICC
Primary Accession	P16152
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	30 KDa

CBR1 Antibody - Additional Information

Gene ID 873

Other Names

15 hydroxyprostaglandin dehydrogenase [NADP];15-hydroxyprostaglandin dehydrogenase [NADP];Carbonyl reductase [NADPH] 1;CBR 1;CBR1;CBR1_HUMAN;CRN;NADPH dependent carbonyl reductase 1;NADPH-dependent carbonyl reductase 1;Prostaglandin 9 ketoreductase; Prostaglandin 9-ketoreductase;Prostaglandin E(2) 9 reductase;Prostaglandin-E(2) 9-reductase;SDR21C1.

Dilution

WB~~1:1000
ICC~~1:100

Format

Purified mouse monoclonal in PBS(pH 7.4)containing with 0.09% (W/V) sodium azide,50% glycerol.

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:<a

[18449627](http://www.uniprot.org/citations/18449627), PubMed:<[18826943](http://www.uniprot.org/citations/18826943)>, PubMed:<[1921984](http://www.uniprot.org/citations/1921984)>, PubMed:<[7005231](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/17344335)>, PubMed:<[18826943](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/28878267)>).

Cellular Location

Cytoplasm.

Tissue Location

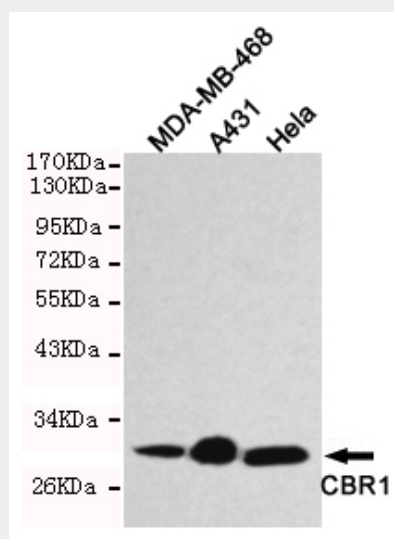
Expressed in kidney (at protein level).

CBR1 Antibody - Protocols

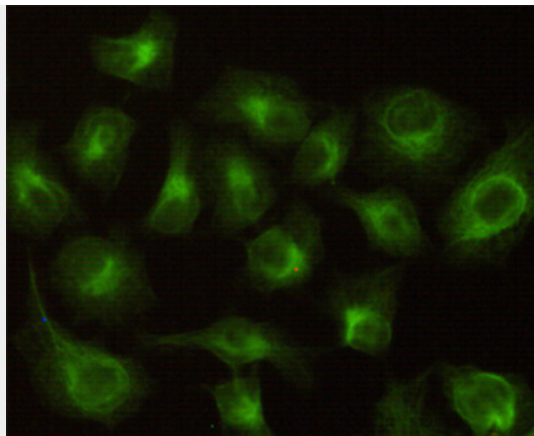
Provided below are standard protocols that you may find useful for product applications.

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

CBR1 Antibody - Images



Western blot detection of CBR1 in HeLa, A431 and MDA-MB-468 cell lysates using CBR1 mouse mAb (1:1000 diluted). Predicted band size: 30KDa, Observed band size: 30KDa.



Immunocytochemistry stain of HeLa using CBR1 mouse mAb (1:100).

CBR1 Antibody - Background

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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.