

Goat Anti-CBR1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1202a**Specification**

Goat Anti-CBR1 Antibody - Product Information

Application	WB, IHC
Primary Accession	P16152
Other Accession	NP_001748 , 873
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	30375

Goat Anti-CBR1 Antibody - Additional Information**Gene ID** 873**Other Names**

Carbonyl reductase [NADPH] 1, 1.1.1.184, 15-hydroxyprostaglandin dehydrogenase [NADP(+)], 1.1.1.197, NADPH-dependent carbonyl reductase 1, Prostaglandin 9-ketoreductase, Prostaglandin-E(2) 9-reductase, 1.1.1.189, CBR1, CBR, CRN

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-CBR1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-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:18449627, PubMed:15799708, PubMed:17912391, PubMed:7005231, PubMed: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

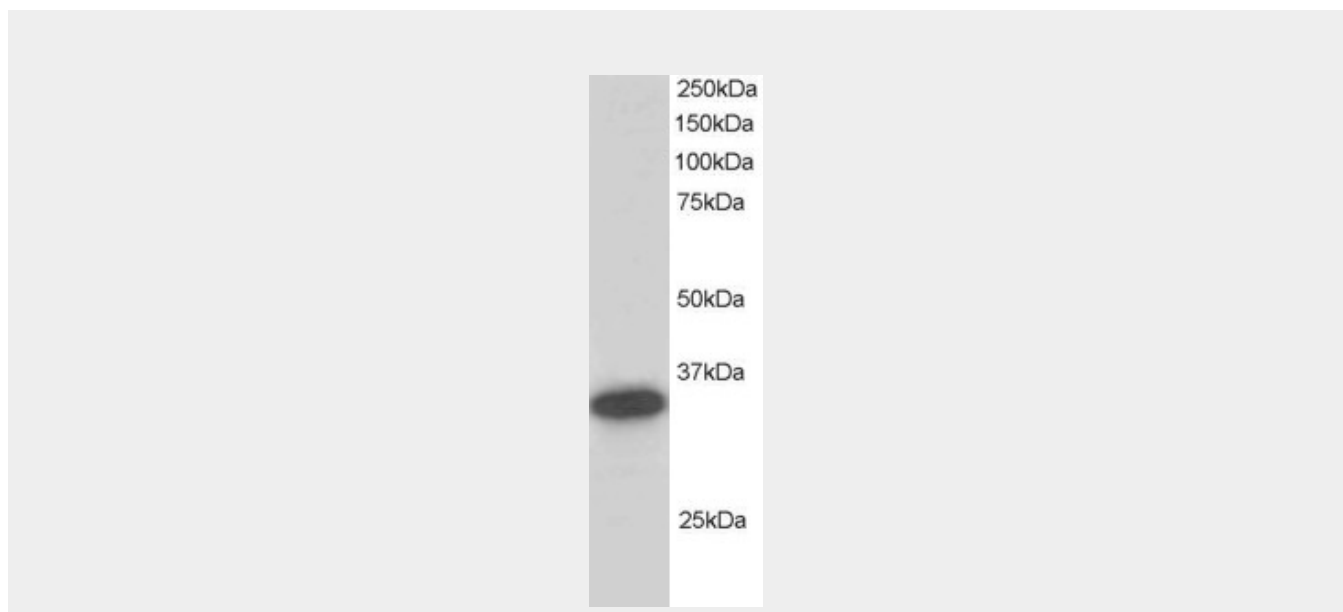
Expressed in kidney (at protein level).

Goat Anti-CBR1 Antibody - Protocols

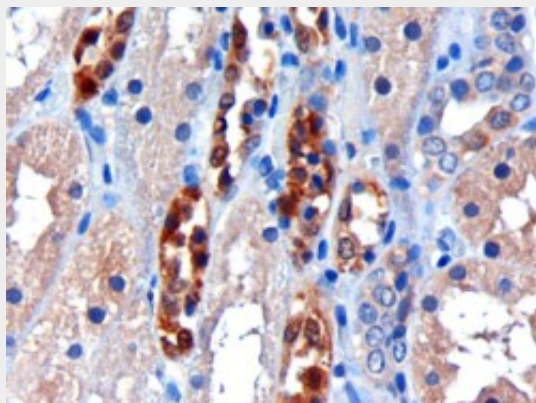
Provided below are standard protocols that you may find useful for product applications.

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

Goat Anti-CBR1 Antibody - Images



AF1202a staining (0.2 µg/ml) of Human Liver lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



AF1202a (3 µg/ml) staining of paraffin embedded Human Kidney. Microwaved antigen retrieval with citrate buffer pH 6, HRP-staining.

Goat Anti-CBR1 Antibody - Background

Carbonyl reductase is one of several monomeric, NADPH-dependent oxidoreductases having wide specificity for carbonyl compounds. This enzyme is widely distributed in human tissues. Another carbonyl reductase gene, CRB3, lies close to this gene on chromosome 21q.

Goat Anti-CBR1 Antibody - References

Proteome analysis of the thalamus and cerebrospinal fluid reveals glycolysis dysfunction and potential biomarkers candidates for schizophrenia. Martins-de-Souza D, et al. J Psychiatr Res, 2010 May 14. PMID 20471030.

Structural basis for substrate specificity in human monomeric carbonyl reductases. Pilka ES, et al. PLoS One, 2009 Oct 20. PMID 19841672.

Genetic susceptibility to distinct bladder cancer subphenotypes. Guey LT, et al. Eur Urol, 2010 Feb. PMID 19692168.

PTEN identified as important risk factor of chronic obstructive pulmonary disease. Hosgood HD 3rd, et al. Respir Med, 2009 Dec. PMID 19625176.

Two nonsynonymous single nucleotide polymorphisms of human carbonyl reductase 1 demonstrate reduced in vitro metabolism of daunorubicin and doxorubicin. Bains OS, et al. Drug Metab Dispos, 2009 May. PMID 19204081.