

**CBR / CBR1 Antibody (clone AT4E12)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS14452****Specification**

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**CBR / CBR1 Antibody (clone AT4E12) - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P16152</a>
Reactivity	<b>Human, Mouse</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Calculated MW	<b>30kDa KDa</b>

**CBR / CBR1 Antibody (clone AT4E12) - 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

**Target/Specificity**

Human CBR1

**Reconstitution & Storage**

Can be stored at 4°C. For long term storage, aliquot and store at -20°C. Avoid repeated freezing and thawing cycles.

**Precautions**

CBR / CBR1 Antibody (clone AT4E12) is for research use only and not for use in diagnostic or therapeutic procedures.

**CBR / CBR1 Antibody (clone AT4E12) - 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:<a href="http://www.uniprot.org/citations/15799708" target="\_blank">15799708</a>, PubMed:<a href="http://www.uniprot.org/citations/17344335" target="\_blank">17344335</a>, PubMed:<a href="http://www.uniprot.org/citations/17912391" target="\_blank">17912391</a>, PubMed:<a href="http://www.uniprot.org/citations/18449627" target="\_blank">18449627</a>, PubMed:<a

href="http://www.uniprot.org/citations/18826943" target="\_blank">18826943</a>, PubMed:<a href="http://www.uniprot.org/citations/1921984" target="\_blank">1921984</a>, PubMed:<a href="http://www.uniprot.org/citations/7005231" target="\_blank">7005231</a>). Can convert prostaglandin E to prostaglandin F<sub>2</sub>-α (By similarity). Can bind glutathione, which explains its higher affinity for glutathione- conjugated substrates. Catalyzes the reduction of S-nitrosoglutathione (PubMed:<a href="http://www.uniprot.org/citations/17344335" target="\_blank">17344335</a>, PubMed:<a href="http://www.uniprot.org/citations/18826943" target="\_blank">18826943</a>). In addition, participates in the glucocorticoid metabolism by catalyzing the NADPH-dependent cortisol/corticosterone into 20β-dihydrocortisol (20β-DHF) or 20β-dihydrocorticosterone (20β-DHB), which are weak agonists of NR3C1 and NR3C2 in adipose tissue (PubMed:<a href="http://www.uniprot.org/citations/28878267" target="\_blank">28878267</a>).

#### Cellular Location

Cytoplasm.

#### Tissue Location

Expressed in kidney (at protein level).

#### Volume

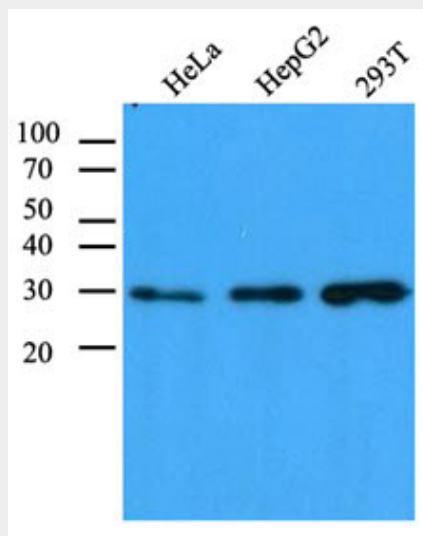
50 μl

#### CBR / CBR1 Antibody (clone AT4E12) - Protocols

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

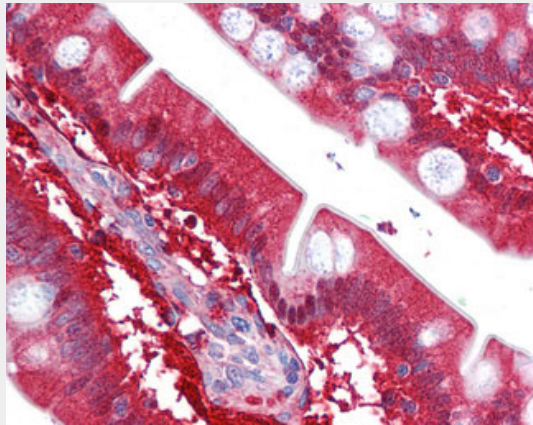
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### CBR / CBR1 Antibody (clone AT4E12) - Images



Cell lysates (40 μg) were resolved by SDS-PAGE, transferred to PVDF membrane and probed

with...



Anti-CBR1 antibody IHC of human small intestine.

### **CBR / CBR1 Antibody (clone AT4E12) - 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.

### **CBR / CBR1 Antibody (clone AT4E12) - 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.