

Carbonyl Reductase 1 Polyclonal Antibody
Catalog # AP68815**Specification****Carbonyl Reductase 1 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P16152
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

Carbonyl Reductase 1 Polyclonal Antibody - Additional Information

Gene ID 873

Other Names

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

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Carbonyl Reductase 1 Polyclonal 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

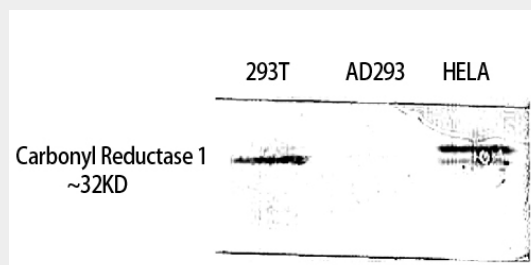
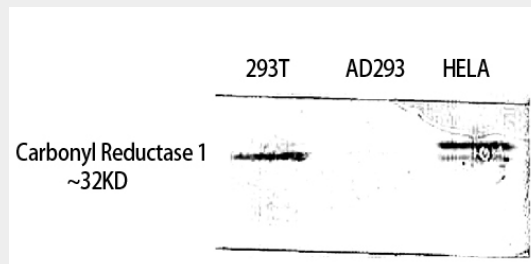
Expressed in kidney (at protein level).

Carbonyl Reductase 1 Polyclonal 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](#)

Carbonyl Reductase 1 Polyclonal Antibody - Images



Carbonyl Reductase 1 Polyclonal 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.