

Carbonyl Reductase 1 Polyclonal Antibody

Catalog # AP68815

Product Information

Application WB, IHC-P
Primary Accession P16152
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 30375

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. IHC-P~~N/A

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

azide.

Storage Conditions -20°C

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).

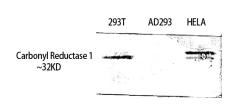
Cellular Location Cytoplasm.

Tissue Location Expressed in kidney (at protein level).

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.

Images



Western Blot analysis of 293T HELA using Carbonyl Reductase 1 Polyclonal Antibody. Antibody was diluted at 1:1000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.