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Anti-CBR1 Antibody (2C9-B12-C4)

Mouse Monoclonal Antibody
Catalog # ABV12056

Product Information

Application	WB, IF
Primary Accession	P16152
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Names	2C9-B12-C4
Calculated MW	30375

Additional Information

Gene ID	873
Application & Usage	WB: HeLa, A431 and MDA-MB-468 cell lysates; IF: HeLa cells
Other Names	Carbonyl reductase [NADPH] 1, 15-hydroxyprostaglandin dehydrogenase [NADP(+)], NADPH-dependent carbonyl reductase 1, Prostaglandin 9-ketoreductase, Prostaglandin-E(2) 9-reductase, Short chain dehydrogenase/reductase family 21C member 1
Target/Specificity	CBR1
Antibody Form	Liquid
Appearance	Colorless liquid
Formulation	In PBS (pH 7.4) containing with 0.2% sodium azide, 50% glycerol
Handling	The antibody solution should be gently mixed before use.
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-CBR1 Antibody (2C9-B12-C4) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

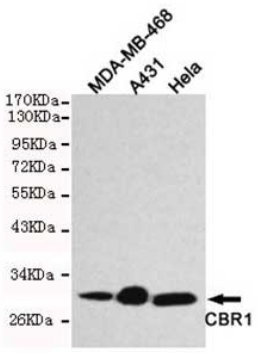
Name	CBR1 (HGNC:1548)
Synonyms	CBR, CRN, SDR21C1

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).

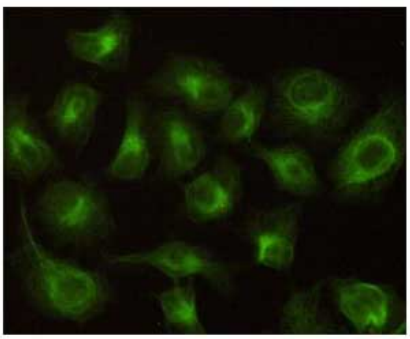
Background

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 detection of CBR1 in HeLa, A431 and MDAMB-468 cell lysates using CBR1 mouse mAb



immunocytochemistry stain of HeLa using CBR1 mouse mAb

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