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Anti-CBR3 Antibody

Catalog # AP60754

Product Information

Application	WB, IHC, IF/IC
Primary Accession	O75828
Reactivity	Human, Mouse, Rat, Bovine, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	30850

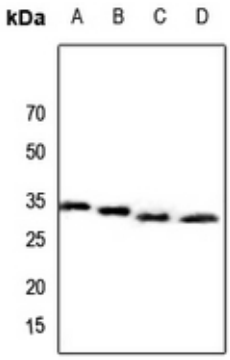
Additional Information

Gene ID	874
Other Names	Carbonyl reductase [NADPH] 3; NADPH-dependent carbonyl reductase 3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CBR3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

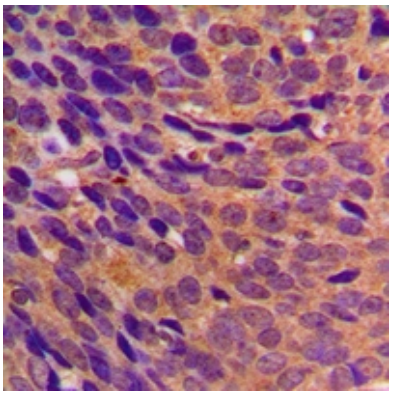
Protein Information

Name	CBR3 (HGNC:1549)
Function	Catalyzes the NADPH-dependent reduction of carbonyl compounds to their corresponding alcohols (PubMed:18493841). Has low NADPH- dependent oxidoreductase activity. Acts on several orthoquinones, acts as well on non-quinone compounds, such as isatin or on the anticancer drug oracin (PubMed:15537833, PubMed:18493841, PubMed:19841672). Best substrates for CBR3 is 1,2- naphthoquinone, hence could play a role in protection against cytotoxicity of exogenous quinones (PubMed:19841672). Exerts activity toward ortho-quinones but not paraquinones. No endogenous substrate for CBR3 except isatin has been identified (PubMed:19841672).
Cellular Location	Cytoplasm.
Tissue Location	Detected in ovary, pancreas, intestine, colon, kidney, brain, thymus, lung, heart, liver, spleen, leukocyte, prostate and testis.

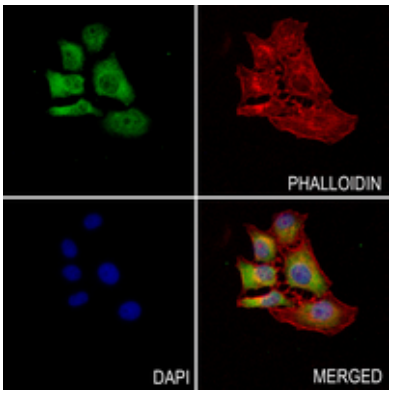
Images



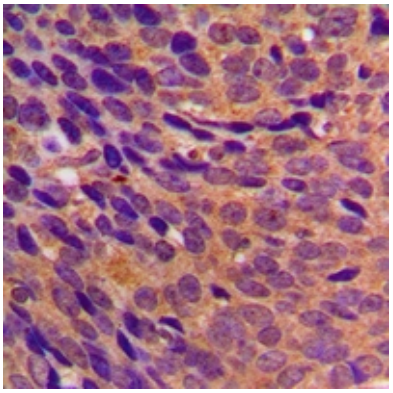
Western blot analysis of CBR3 expression in mouse lung (A), mouse brain (B), mouse liver (C), rat liver (D) whole cell lysates. (Predicted band size: 30 kD; Observed band size: 31 kD)



Immunohistochemical analysis of CBR3 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CBR3 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



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