Human Carbonyl reductase 1/CBR1 antibody

Catalog Number: ATGA0200

PRODUCT INFORMATION

Catalog number
ATGA0200

Clone No.
AT4E12

Product type
Monoclonal Antibody

UnitProt No.
P16152

NCBI Accession No.
NP_001748

Alternative Names
Carbonyl reductase 1, Carbonyl reductase 1, CBR, hCBR1, SDR21C1, CBR1, Carbonyl reductase 1 15 hydroxyprostaglandin dehydrogenase [NADP+], Carbonyl reductase [NADPH] 1.CBR 1, CRN, NADPH dependent carbonyl reductase 1, Prostaglandin 9 ketoreductase, Prostaglandin E(2) 9 reductase.

PRODUCT SPECIFICATION

Antibody Host
Mouse

Reacts With
Human

Concentration
1mg/ml (determined by BCA assay)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen
Recombinant human CBR1 (1-277 aa) purified from E. coli

Isotype
IgG2a kappa

Purification Note
By protein-G affinity chromatography

Application
ELISA, WB, ICC/IF

Usage
The antibody has been tested by ELISA, Western blot analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended dilution range for Western blot analysis is 1:500 ~ 1:1,000.

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Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

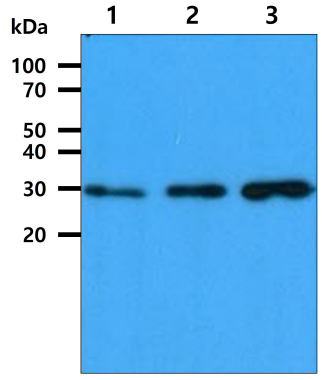
Carbonyl reductase 1 (CBR1) is a NADPH-dependent, monomeric, and cytosolic enzyme belonging to a family of short-chain dehydrogenases/reductases. This protein consists of 277 amino acid residues and is widely distributed in human tissues such as liver, epidermis, stomach, small intestine, kidney, neuronal cells, and smooth muscle fiber. CBR1 metabolizes many toxic environmental quinones and pharmacological relevant substrates such as the anticancer drug, doxorubicin. The best substrates of CBR1 are quinones, including ubiquinone-1 and tocophrolquinone (vitamin E).

General References

Lemieux N, et al. (1993) Genomics. 15(1):169-72.
Wermuth B, et al. (1986). Biochem. Pharmacol. 35 (8): 1277-82

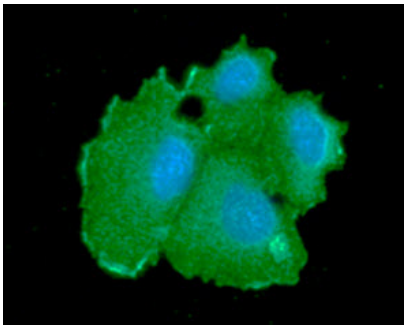
DATA

Western blot analysis (WB)



The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human CBR1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1.: HeLa cell lysate
Lane 2.: HepG2 cell lysate
Lane 3.: 293T cell lysate

Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of CBR1 in Hep3B cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-CBR1 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).