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# **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  $1:500 \sim 1:1,000$ .



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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**

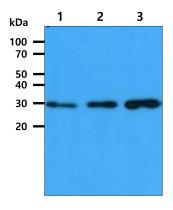
Carbonyl reductase 1 (CBR1) is a NADPH-dependent, monomeric, and cytosolic enzyme belonging to a family of short-chain dehydrogenases/reductases. This protein consists of 277 amino acid residues and is widely distributed in human tissues such as liver, epidermis, stomach, small intestine, kidney, neuronal 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**

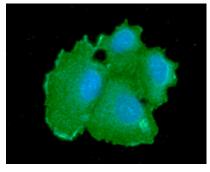
# Western blot analysis (WB)



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).

