# SANTA CRUZ BIOTECHNOLOGY, INC.

# EBP (N-15): sc-83791



#### BACKGROUND

EBP (emopamil-binding protein), also known as CPX, CHO2, CPXD or CDPX2, is a 230 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum (ER) and is involved in steroid biosynthesis. Functioning to catalyze the conversion of  $\Delta^8$ -sterols to their corresponding  $\Delta^7$ -isomers, EBP plays an important role in drug transport and cholesterol metabolism within the ER. Defects in the gene encoding EBP are the cause of chondrodysplasia punctata X-linked dominant type 2 (CDPX2), a heterogeneous disorder that is caused by defective cholesterol biosynthesis. CDPX2 is characterized by punctiform calcification of the bones leading to linear ichthyosis, cataracts and short stature.

## REFERENCES

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#### CHROMOSOMAL LOCATION

Genetic locus: EBP (human) mapping to Xp11.23.

## SOURCE

EBP (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of EBP of human origin.

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83791 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

EBP (N-15) is recommended for detection of EBP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EBP (N-15) is also recommended for detection of EBP in additional species, including canine.

Suitable for use as control antibody for EBP siRNA (h): sc-77218, EBP shRNA Plasmid (h): sc-77218-SH and EBP shRNA (h) Lentiviral Particles: sc-77218-V.

Molecular Weight of EBP: 26 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### DATA



expression in Jurkat (**A**), HeLa (**B**) and Hep G2 (**C**) whole cell lysates.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.