

EBP (A-9): sc-374267

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 Δ^8 -sterols to their corresponding Δ^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.

CHROMOSOMAL LOCATION

Genetic locus: EBP (human) mapping to Xp11.23; Ebp (mouse) mapping to X A1.1.

SOURCE

EBP (A-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-25 at the N-terminus of EBP of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EBP (A-9) is available conjugated to agarose (sc-374267 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374267 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374267 PE), fluorescein (sc-374267 FITC), Alexa Fluor[®] 488 (sc-374267 AF488), Alexa Fluor[®] 546 (sc-374267 AF546), Alexa Fluor[®] 594 (sc-374267 AF594) or Alexa Fluor[®] 647 (sc-374267 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-374267 AF680) or Alexa Fluor[®] 790 (sc-374267 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374267 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

EBP (A-9) is recommended for detection of EBP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EBP siRNA (h): sc-77218, EBP siRNA (m): sc-77219, EBP shRNA Plasmid (h): sc-77218-SH, EBP shRNA Plasmid (m): sc-77219-SH, EBP shRNA (h) Lentiviral Particles: sc-77218-V and EBP shRNA (m) Lentiviral Particles: sc-77219-V.

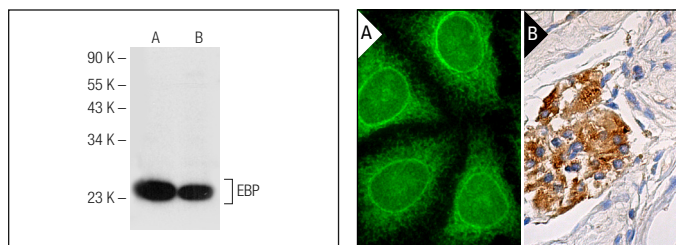
Molecular Weight of EBP: 26 kDa.

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

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



EBP (A-9): sc-374267. Western blot analysis of EBP expression in HeLa (A) and Hep G2 (B) whole cell lysates.

EBP (A-9): sc-374267. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of Leydig cells (B).

SELECT PRODUCT CITATIONS

- Koczok, K., et al. 2019. Subcellular localization of sterol biosynthesis enzymes. *J. Mol. Histol.* 50: 63-73.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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