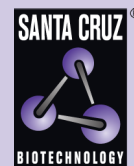


# CtBP (E-12): sc-17759



The Power to Question

## BACKGROUND

CtBP1 is a cellular phosphoprotein that associates with various proteins and functions as a corepressor of transcription. CtBP1 and the related protein CtBP2 are characterized as C-terminal binding protein of adenovirus E1A, and they preferentially associate with the E1A via a five amino acid motif, PLDLS, to repress E1A induced oncogenesis and cellular transformation. CtBP1 is expressed from embryo to adult, but CtBP2 is mainly expressed during embryogenesis. During skeletal and T cell development, CtBP1 and CtBP2 associate with the PLDLSL domain of  $\delta$ EF1, a cellular zinc finger-homeo-domain protein, and thereby enhances  $\delta$ EF1 induced transcriptional silencing. In addition, CtBP complexes with CtIP, a protein that recognizes distinctly different protein motifs from CtBP. CtIP binds to the BRCT repeats within the breast cancer gene BRCA1 and enables CtBP to influence BRCA1 activity. CtIP/CtBP binding to BRCA1 inhibits the transactivation of the p21 promoter, and it is critical for regulating p21 transcription in response to DNA damage.

## CHROMOSOMAL LOCATION

Genetic locus: CTBP1 (human) mapping to 4p16.3, CTBP2 (human) mapping to 10q26.13; Ctbp1 (mouse) mapping to 5 B1, Ctbp2 (mouse) mapping to 7 F3.

## SOURCE

CtBP (E-12) is a mouse monoclonal antibody raised against amino acids 1-440 of CtBP1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CtBP (E-12) is available conjugated to agarose (sc-17759 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-17759 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-17759 PE), fluorescein (sc-17759 FITC), Alexa Fluor® 488 (sc-17759 AF488), Alexa Fluor® 546 (sc-17759 AF546), Alexa Fluor® 594 (sc-17759 AF594) or Alexa Fluor® 647 (sc-17759 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-17759 AF680) or Alexa Fluor® 790 (sc-17759 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

CtBP (E-12) is recommended for detection of CtBP1 and CtBP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:200-1:2000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

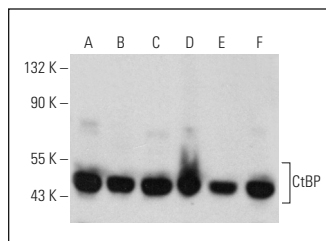
Molecular Weight of CtBP: 48 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, NRK whole cell lysate: sc-364197 or SH-SY5Y cell lysate: sc-3812.

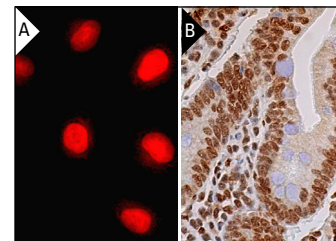
## STORAGE

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

## DATA



CtBP (E-12): sc-17759. Western blot analysis of CtBP expression in SH-SY5Y (A), Neuro-2A (B), Sol8 (C), 3T3-L1 (D), C6 (E) and NRK (F) whole cell lysates.



CtBP (E-12): sc-17759. Immunofluorescence detection of CtBP in formalin-fixed HeLa cells showing nuclear localization. Detection reagent used: m-IgGk BP-PE: sc-516141 (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing nuclear staining of glandular cells (B).

## SELECT PRODUCT CITATIONS

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## RESEARCH USE

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