

CtBP1 (C-17): sc-5963

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 5-amino acid motif, PLDSL, 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 PLDSL domain of δ EF1, a cellular zinc finger-homeodomain protein, and thereby enhances δ 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; Ctbp1 (mouse) mapping to 5 B1.

SOURCE

CtBP1 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CtBP1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-5963 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CtBP1 (C-17) is recommended for detection of CtBP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

CtBP1 (C-17) is also recommended for detection of CtBP1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for CtBP1 siRNA (h): sc-35122, CtBP1 siRNA (m): sc-35121, CtBP1 shRNA Plasmid (h): sc-35122-SH, CtBP1 shRNA Plasmid (m): sc-35121-SH, CtBP1 shRNA (h) Lentiviral Particles: sc-35122-V and CtBP1 shRNA (m) Lentiviral Particles: sc-35121-V.

Molecular Weight of CtBP1: 48 kDa.

Positive Controls: CtBP1 (m): 293T Lysate: sc-119492, KNRK nuclear extract: sc-2141 or HeLa nuclear extract: sc-2120.

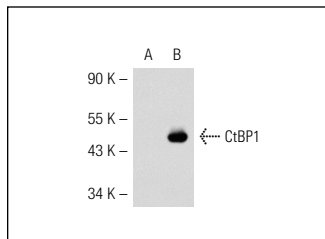
RESEARCH USE

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

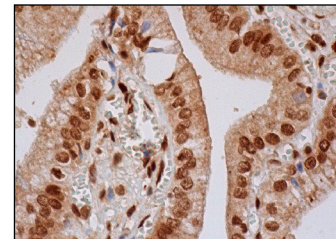
STORAGE

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

DATA



CtBP1 (C-17): sc-5963. Western blot analysis of CtBP1 expression in non-transfected: sc-117752 (A) and mouse CtBP1 transfected: sc-119492 (B) 293T whole cell lysates.



CtBP1 (C-17): sc-5963. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing nuclear and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Fernandes, I., et al. 2003. Ligand-dependent nuclear receptor corepressor LCoR functions by histone deacetylase-dependent and -independent mechanisms. *Mol. Cell* 11: 139-150.
2. Herzog, B., et al. 2007. The nuclear receptor cofactor, receptor-interacting protein 140, is required for the regulation of hepatic lipid and glucose metabolism by liver x receptor. *Mol. Endocrinol.* 21: 2687-2697.
3. Kitamura, N., et al. 2009. Suppressive role of C-terminal binding protein 1 in IL-4 synthesis in human T cells. *Biochem. Biophys. Res. Commun.* 382: 326-330.
4. Palijan, A., et al. 2009. Ligand-dependent corepressor LCoR is an attenuator of progesterone-regulated gene expression. *J. Biol. Chem.* 284: 30275-30287.
5. Magee, T.R., et al. 2011. Maternal undernourished fetal kidneys exhibit differential regulation of nephrogenic genes including downregulation of the Notch signaling pathway. *Reprod. Sci.* 18: 563-576.
6. Kasaai, B., et al. 2012. Spatial and temporal localization of WNT signaling proteins in a mouse model of distraction osteogenesis. *J. Histochem. Cytochem.* 60: 219-228.

PROTOCOLS

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



Try **CtBP (E-12): sc-17759** or **CtBP1 (G-6): sc-398945**, our highly recommended monoclonal alternatives to CtBP1 (C-17). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **CtBP (E-12): sc-17759**.