

CtBP2 (C-16): sc-5967

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 proteins 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-homeo-domain 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: CTBP2 (human) mapping to 10q26.13; Ctbp2 (mouse) mapping to 7 F3.

SOURCE

CtBP2 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CtBP2 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-5967 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

CtBP2 (C-16) is recommended for detection of CtBP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CtBP2 (C-16) is also recommended for detection of CtBP2 in additional species, including bovine, porcine and avian.

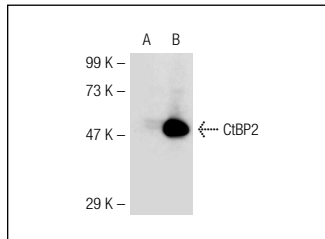
Suitable for use as control antibody for CtBP2 siRNA (h): sc-37767, CtBP2 siRNA (m): sc-37768, CtBP2 shRNA Plasmid (h): sc-37767-SH, CtBP2 shRNA Plasmid (m): sc-37768-SH, CtBP2 shRNA (h) Lentiviral Particles: sc-37767-V and CtBP2 shRNA (m) Lentiviral Particles: sc-37768-V.

Positive Controls: HeLa whole cell lysate: sc-2200 or CtBP2 (m): 293T Lysate: sc-126676.

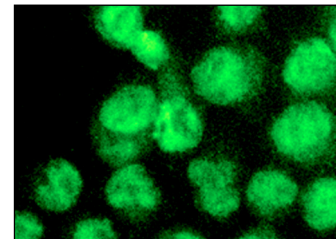
RECOMMENDED SECONDARY REAGENTS

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



CtBP2 (C-16): sc-5967. Western blot analysis of CtBP2 expression in non-transfected: sc-117752 (A) and mouse CtBP2 transfected: sc-126676 (B) 293T whole cell lysates.



CtBP2 (C-16): sc-5967. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

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. Lee, S., et al. 2011. Ataxin-1 occupies the promoter region of E-cadherin *in vivo* and activates CtBP2-repressed promoter. *Biochim. Biophys. Acta* 1813: 713-722.
3. 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.

RESEARCH USE

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

PROTOCOLS

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


 MONOS
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Try **CtBP (E-12): sc-17759** or **CtBP (C-1): sc-17805**, our highly recommended monoclonal alternatives to CtBP2 (C-16). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CtBP (E-12): sc-17759**.