SANTA CRUZ BIOTECHNOLOGY, INC.

Cbp (G-8): sc-365387



BACKGROUND

The Src family of protein tyrosine kinases (Src-PTKs) is important in the regulation of growth and differentiation of eukaryotic cells. The activity of Src-PTKs in cells of different types is negatively controlled by Csk. Csk binding protein (Cbp), also designated phosphoprotein associated with glycosphingo-lipidenriched microdomains (GEMs) or PAG, is a ubiquitously expressed transmembrane phosphoprotein that binds specifically to the SH2 domain of Csk. Cbp is involved in the membrane localization of Csk and in Csk-mediated inhibition of c-Src. In the plasma membrane, Cbp is exclusively localized in the GM1 ganglioside-enriched detergent-insoluble membrane domain, which is important in receptor-mediated signaling. Cbp is a component of the regulatory mechanism controlling the activity of membrane-associated Src-PTKs.

CHROMOSOMAL LOCATION

Genetic locus: PAG1 (human) mapping to 8q21.13; Pag1 (mouse) mapping to 3 A1.

SOURCE

Cbp (G-8) is a mouse monoclonal antibody raised against amino acids 333-432 of Cbp of human origin.

PRODUCT

Each vial contains 200 μg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Cbp (G-8) is available conjugated to agarose (sc-365387 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365387 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365387 PE), fluorescein (sc-365387 FITC), Alexa Fluor[®] 488 (sc-365387 AF488), Alexa Fluor[®] 546 (sc-365387 AF546), Alexa Fluor[®] 594 (sc-365387 AF594) or Alexa Fluor[®] 647 (sc-365387 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-365387 AF680) or Alexa Fluor[®] 790 (sc-365387 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Cbp (G-8) is recommended for detection of Cbp 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 Cbp siRNA (h): sc-29952, Cbp siRNA (m): sc-29953, Cbp shRNA Plasmid (h): sc-29952-SH, Cbp shRNA Plasmid (m): sc-29953-SH, Cbp shRNA (h) Lentiviral Particles: sc-29952-V and Cbp shRNA (m) Lentiviral Particles: sc-29953-V.

Molecular Weight of Cbp: 80-90 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, KNRK whole cell lysate: sc-2214 or NIH/3T3 whole cell lysate: sc-2210.

STORAGE

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

DATA





Cbp (G-8): sc-365387. Western blot analysis of Cbp expression in A-431 (\pmb{A}), Raji (\pmb{B}), NIH/3T3 (\pmb{C}) and KNRK (\pmb{D}) whole cell lysates.

Cbp (G-8): sc-365387. Immunofluorescence staining of formalin-fixed Hep G2 cells showing membrane and cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, parafifn-embedded human blood vessel showing plasma staining (**B**).

SELECT PRODUCT CITATIONS

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- Peng, L., et al. 2021. Histone deacetylase 2-mediated epigenetic regulation is involved in the early isoflurane exposure-related increase in susceptibility to anxiety-like behaviour evoked by chronic variable stress in mice. Neurochem. Res. 46: 2333-2347.
- 7. Fan, Z., et al. 2022. SLC25A38 as a novel biomarker for metastasis and clinical outcome in uveal melanoma. Cell Death Dis. 13: 330.
- Jana, M., et al. 2023. Activation of PPARα exhibits therapeutic efficacy in a mouse model of juvenile neuronal ceroid lipofuscinosis. J. Neurosci. 43: 1814-1829.
- Wang, G., et al. 2024. The DNA damage-independent ATM signalling maintains CBP/DOT1L axis in MLL rearranged acute myeloid leukaemia. Oncogene 43: 1900-1916.

RESEARCH USE

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