

# 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 glycosphingolipid-enriched microdomains (GEMs) or PAG, is a ubiquitously expressed trans-membrane 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<sub>1</sub> 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 µg per 100-500 µg 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.

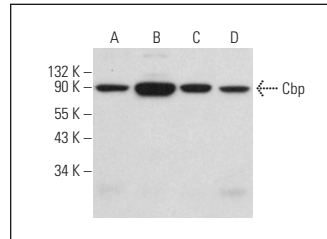
Molecular Weight of Cbp: 80-90 kDa.

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

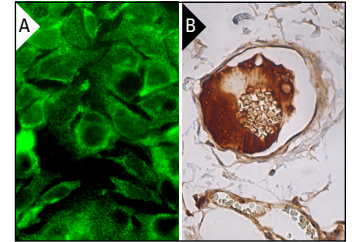
## STORAGE

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 (A), Raji (B), NIH/3T3 (C) and KNRK (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, paraffin-embedded human blood vessel showing plasma staining (B).

## SELECT PRODUCT CITATIONS

- Marban, C., et al. 2007. Recruitment of chromatin-modifying enzymes by CTIP2 promotes HIV-1 transcriptional silencing. *EMBO J.* 26: 412-423.
- Stanley, J.A., et al. 2012. Androgen receptor expression in human thyroid cancer tissues: a potential mechanism underlying the gender bias in the incidence of thyroid cancers. *J. Steroid Biochem. Mol. Biol.* 130: 105-124.
- Zhang, Z., et al. 2015. Interferon regulatory factor 1 marks activated genes and can induce target gene expression in systemic lupus erythematosus. *Arthritis Rheumatol.* 67: 785-796.
- Zheng, Y., et al. 2019. GATA3-dependent epigenetic upregulation of CCL21 is involved in the development of neuropathic pain induced by bortezomib. *Mol. Pain* 15: 1744806919863292.
- Simoncelli, S., et al. 2020. Multi-color molecular visualization of signaling proteins reveals how C-terminal Src kinase nanoclusters regulate T cell receptor activation. *Cell Rep.* 33: 108523.
- 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.
- Fan, Z., et al. 2022. SLC25A38 as a novel biomarker for metastasis and clinical outcome in uveal melanoma. *Cell Death Dis.* 13: 330.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.