SANTA CRUZ BIOTECHNOLOGY, INC.

CCL28 (G-2): sc-376654

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CCL28 functions in chemotactic activity for resting CD4, CD8 T cells and eosinophils. CCL28, a secreted protein, binds to CCR3 and CCR10 (known previously as orphan G protein-coupled receptor GPR2) and induces calcium mobilization in a dose-dependent manner. CCL28 is preferentially expressed by epithelial cells of diverse tissues including normal and pathological colon, salivary gland, mammary gland, trachea and rectum. CCL28 belongs to the subfamily of small cytokine CC genes that encode proteins having two adjacent cysteines. Several alternative splice variants may exist.

REFERENCES

1. Wang, W., et al. 2000. Identification of a novel chemokine (CCL28), which binds CCR10 (GPR2). J. Biol. Chem. 275: 22313-22323.
2. Hieshima, K., et al. 2003. CCL28 has dual roles in mucosal immunity as a chemokine with broad-spectrum antimicrobial activity. J. Immunol. 170: 1452-1461.
3. Lazarus, N.H., et al. 2003. A common mucosal chemokine (mucosae-associated epithelial chemokine/CCL28) selectively attracts IgA plasmablasts. J. Immunol. 170: 3799-3805.
4. Wilson, E., et al. 2004. CCL28 controls immunoglobulin (Ig)A plasma cell accumulation in the lactating mammary gland and IgA antibody transfer to the neonate. J. Exp. Med. 200: 805-809.
5. Hanamoto, H., et al. 2004. Expression of CCL28 by Reed-Sternberg cells defines a major subtype of classical Hodgkin's disease with frequent infiltration of eosinophils and/or plasma cells. Am. J. Pathol. 164: 997-1006.

CHROMOSOMAL LOCATION

Genetic locus: Ccl28 (mouse) mapping to 13.

SOURCE

CCL28 (G-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 103-130 at the C-terminus of CCL28 of mouse 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.

CCL28 (G-2) is available conjugated to agarose (sc-376654 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376654 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376654 PE), fluorescein (sc-376654 FITC), Alexa Fluor® 488 (sc-376654 AF488), Alexa Fluor® 546 (sc-376654 AF546), Alexa Fluor® 594 (sc-376654 AF594) or Alexa Fluor® 647 (sc-376654 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376654 AF680) or Alexa Fluor® 790 (sc-376654 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376654 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

CCL28 (G-2) is recommended for detection of CCL28 of mouse 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CCL28 siRNA (m): sc-72145, CCL28 shRNA Plasmid (m): sc-72145-SH and CCL28 shRNA (m) Lentiviral Particles: sc-72145-V.

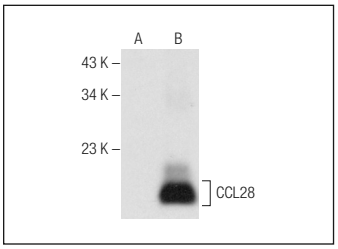
Molecular Weight of CCL28: 14 kDa.

Positive Controls: CCL28 (m): 293T Lysate: sc-119084.

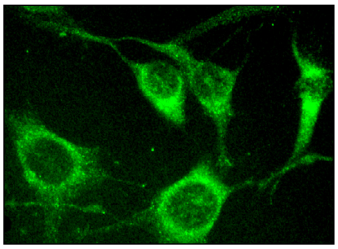
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



CCL28 (G-2): sc-376654. Western blot analysis of CCL28 expression in non-transfected: sc-117752 (**A**) and mouse CCL28 transfected: sc-119084 (**B**) 293T whole cell lysates



CCL28 (G-2): sc-376654. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Wang, P., et al. 2019. CCL28 promotes locomotor recovery after spinal cord injury via recruiting regulatory T cells. Aging 11: 7402-7415.
2. Sun, L., et al. 2023. Bile salt hydrolase in non-enterotoxigenic *Bacteroides* potentiates colorectal cancer. Nat. Commun. 14: 755.

STORAGE

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

RESEARCH USE

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