

CCL28 (mBA-111): sc-4923

BACKGROUND

CCL28 functions in chemotactic activity for resting CD4, CD8 T-cells and eosinophils. CCL28 undergoes secretion and binds to CCR3 and CCR10 (known previously as orphan G protein-coupled receptor GPR2). This binding event induces calcium mobilization in a dose-dependent manner. CCL28 influences the physiology of extracutaneous epithelial tissues, including mucosal organs. CCL28 is present in epithelial cells of 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. and Butcher, E.C. 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., Nakayama, T., Miyazato, H., Takegawa, S., Hieshima, K., Tatsumi, Y., Kanamaru, A., and Yoshie, O. 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.
6. SWISS-PROT/TrEMBL (Q9NRJ3). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

SOURCE

CCL28 (mBA-111) is produced in *E. coli* as 12.6 kDa biologically active protein corresponding to 111 amino acids of CCL28 of mouse origin.

PRODUCT

CCL28 (mBA-111) is purified from bacterial lysates (>98%); supplied as 20 µg purified protein.

BIOLOGICAL ACTIVITY

CCL28 (mBA-111) is biologically active as determined by its ability to chemoattract murine lymphocytes using a concentration range of 1.0-10.0 ng/ml

PROTOCOLS

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

RECONSTITUTION

In order to avoid freeze/thaw damaging of the active protein, dilute protein when first used to desired working concentration. Either a sterile filtered standard buffer (such as 50mM TRIS or 1X PBS) or water can be used for the dilution. Store any thawed aliquot in refrigeration at 2° C to 8° C for up to four weeks, and any frozen aliquot at -20° C to -80° C for up to one year. It is recommended that frozen aliquots be given an amount of standard cryopreservative (such as Ethylene Glycol or Glycerol 5-20% v/v), and refrigerated samples be given an amount of carrier protein (such as heat inactivated FBS or BSA to 0.1% v/v) or non-ionic detergent (such as Triton X-100 or Tween 20 to 0.005% v/v), to aid stability during storage.

STORAGE

Store desiccated at -20° C; stable for one year from the date of shipment.

RESEARCH USE

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