Human CXCL17/VCC-1 Antibody

Monoclonal Mouse IgG_{2B} Clone # 422208

Catalog Number: MAB4207

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CXCL17/VCC-1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 25% cross-reactivity with recombinant mouse CXCL17 is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 422208
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human CXCL17/VCC-1 Leu24-Leu119 Accession # Q6UXB2
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

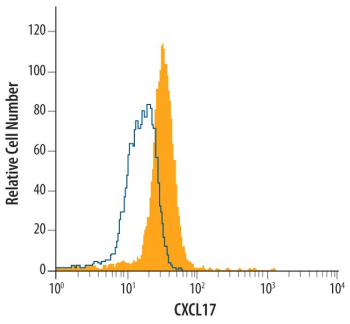
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human CXCL17 (Catalog # 4207-DM)
Immunocytochemistry	8-25 µg/mL	See Below
Intracellular Staining by Flow Cytometry	0.25 µg/10^6 cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

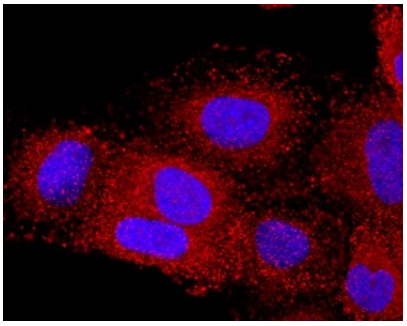
DATA

Intracellular Staining by Flow Cytometry



Detection of CXCL17/VCC-1 in A549 Human Cell Line by Flow Cytometry. A549 human lung carcinoma cell line was stained with Mouse Anti-Human CXCL17/VCC-1 Monoclonal Antibody (Catalog # MAB4207, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG $F(ab')_2$ Secondary Antibody (Catalog # F0101B). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

Immunocytochemistry



CXCL17/VCC-1 in A549 Human Cell Line. CXCL17/VCC-1 was detected in immersion fixed A549 human lung carcinoma cell line using Mouse Anti-Human CXCL17/VCC-1 Monoclonal Antibody (Catalog # MAB4207) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI(blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CXCL17, also known as dendritic cell and monocyte chemokine-like protein (DMC) and VEGF-correlated chemokine-1 (VCC-1), is a secreted molecule with a size and predicted three-dimensional folding pattern similar to that of chemokines CXCL8/IL-8 and CXCL14/BRAK (1, 2). It has no predicted N-glycosylation site. Cleavage of a 23 amino acid (aa) signal sequence yields the mature 96 aa human CXCL17. CXCL17 is constitutively produced by airway and intestinal epithelium (1). It induces the chemotaxis of quiescent, but not LPS-activated peripheral blood monocytes and dendritic cells (1). CXCL17 expression is increased in endothelial cells when they are induced to form tubes *in vitro* (2). Transgenic overexpression in NIH3T3 cells causes upregulation of proteins such as VEGF and FGF basic, and increases cell growth rate and tumorigenicity (2). CXCL17, plus two other chemokines that play roles in angiogenesis, CXCL1/GRO and CXCL8/IL-8, show a correlated expression pattern with VEGF in primary lung, breast and esophageal tumors (2). CXCL17 is, therefore, suggested to play a role in tumor angiogenesis. Mature human CXCL17 shares 73%, 71% and 64% amino acid sequence identity with bovine, mouse and rat CXCL17, respectively.

References:

1. Pisabarro, M.T. *et al.* (2006) J. Immunol. **176**:2069.
2. Weinstein, E.J. *et al.* (2006) Biochem. Biophys. Res. Commun. **350**:74.

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