

IP-10 (1): sc-101500

BACKGROUND

Chemokines are members of a superfamily of inducible, secreted, pro-inflammatory cytokines. Members of the chemokine family exhibit 20% to 50% homology in their predicted amino acid sequences and are divided into four subfamilies: C-C, C-X-C, C and C-X3-C. In the C-X-C or α subfamily, the first two of four cysteine motifs are separated by another amino acid residue. In the second subfamily, designated C-C or β , the first cysteines are adjacent. C subfamily members, also designated γ chemokines, lack the first and third cysteine residues of the conserved motif. In the C-X3-C, or δ subfamily, members have three amino acids between the two cysteines. The C-X-C chemokine subfamily includes IL-8, GRO $\alpha/\beta/\gamma$ (and the murine homologs KC, MIP-2 α and MIP-2 β), platelet basic protein, ENA-78, GCP-2, PF4, IP-10 (and its murine homolog, CRG) and MIG.

CHROMOSOMAL LOCATION

Genetic locus: CXCL10 (human) mapping to 4q21.1.

SOURCE

IP-10 (1) is a mouse monoclonal antibody raised against recombinant IP-10 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IP-10 (1) is available conjugated to agarose (sc-101500 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-101500 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-101500 PE), fluorescein (sc-101500 FITC), Alexa Fluor[®] 488 (sc-101500 AF488), Alexa Fluor[®] 546 (sc-101500 AF546), Alexa Fluor[®] 594 (sc-101500 AF594) or Alexa Fluor[®] 647 (sc-101500 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-101500 AF680) or Alexa Fluor[®] 790 (sc-101500 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

IP-10 (1) is recommended for detection of IP-10 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for IP-10 siRNA (h): sc-43866, IP-10 shRNA Plasmid (h): sc-43866-SH and IP-10 shRNA (h) Lentiviral Particles: sc-43866-V.

Molecular Weight of IP-10: 10 kDa.

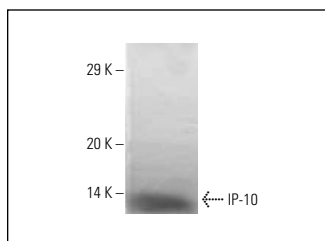
STORAGE

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.

DATA



IP-10 (1): sc-101500. Western blot analysis of human recombinant IP-10.

SELECT PRODUCT CITATIONS

- Gao, R., et al. 2013. Cytokine and chemokine profiles in lung tissues from fatal cases of 2009 pandemic influenza A (H1N1): role of the host immune response in pathogenesis. *Am. J. Pathol.* 183: 1258-1268.
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- Bronger, H., et al. 2016. CXCL9 and CXCL10 predict survival and are regulated by cyclooxygenase inhibition in advanced serous ovarian cancer. *Br. J. Cancer* 115: 553-563.
- Riani, M., et al. 2017. Bullous pemphigoid outcome is associated with CXCL10-induced matrix metalloproteinase 9 secretion from monocytes and neutrophils but not lymphocytes. *J. Allergy Clin. Immunol.* 139: 863-872.e3.
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- Romero, J.M., et al. 2020. A four-chemokine signature is associated with a T cell-inflamed phenotype in primary and metastatic pancreatic cancer. *Clin. Cancer Res.* 26: 1997-2010.
- da Silva, T.P., et al. 2020. Macrophage polarization in leprosy-HIV co-infected patients. *Front. Immunol.* 11: 1493.
- Zhang, W., et al. 2021. Targeting KDM4A epigenetically activates tumor-cell-intrinsic immunity by inducing DNA replication stress. *Mol. Cell* 81: 2148-2165.e9.
- Ferreira, H., et al. 2021. Potential role of CXCL10 in monitoring response to treatment in leprosy patients. *Front. Immunol.* 12: 662307.

PROTOCOLS

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