For Research Use Only

CXCR4 Monoclonal antibody

Catalog Number:60042-1-Ig Featured Product 53 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
60042-1-Ig

Size:
150ul , Concentration: 2000 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgM

Immunogen Catalog Number:
AG1528

GenBank Accession Number:
BC020968

GeneID (NCBI):
7852

UNIPROT ID:
P61073

Full Name:
chemokine (C-X-C motif) receptor 4

Calculated MW:
352 aa, 40 kDa

Observed MW:
60-70 kDa

Purification Method:
Caprylic acid/ammonium sulfate precipitation

CloneNo.:
4B5E4

Recommended Dilutions:
WB 1:1000-1:4000
IHC 1:300-1:1200

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB, IHC, IF, CoIP

Species Specificity:
human

Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, THP-1 cells, Ramos cells, Daudi cells, Jurkat cells, Raji cells, K-562 cells

IHC : human tonsillitis tissue, human breast cancer tissue, human prostate cancer tissue

Background Information

C-X-C chemokine receptor type 4 (CXCR4) is a widely expressed G protein-coupled seven-transmembrane receptor. CXCL12/SDF-1 is the biological ligand for CXCR4. The binding of CXCL12 to CXCR4 induces intracellular signaling through several divergent pathways initiating signals related to chemotaxis, cell survival and/or proliferation, increase in intracellular calcium, and gene transcription (PMID: 20484021). CXCR4 also functions as a coreceptor for HIV-1 entry (PMID: 9427609). CXCR4 has a calculated molecular weight of 40 kDa. In addition to the predicted species of 45-47 kDa for glycosylated CXCR4 monomers, due to ubiquitination, dimeration, and different degrees of glycosylation, additional species can also exist and have been reported in some research, including 67 kDa (PMID: 23917520), 55, 67, 87 kDa (PMID: 20028517), 80 kDa (PMID: 10506573), 47, 50, 62, and 98 kDa (PMID: 16204649).

Notable Publications

Author	Pubmed ID	Journal	Application
Yibin Zhao	34540665	Front Oncol	WB
Jianjun Ma	36368650	Biochim Biophys Acta Mol Basis Dis	IF
Rui Liu	26459497	Mol Med Rep	WB

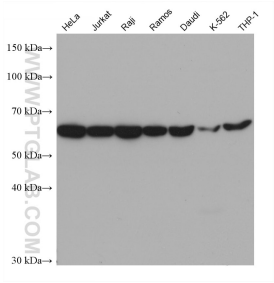
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.1% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

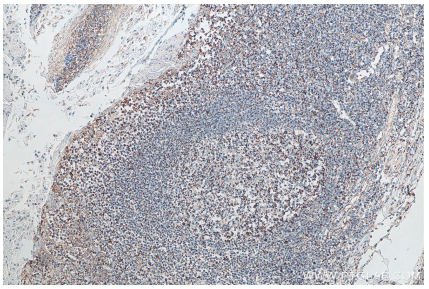
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

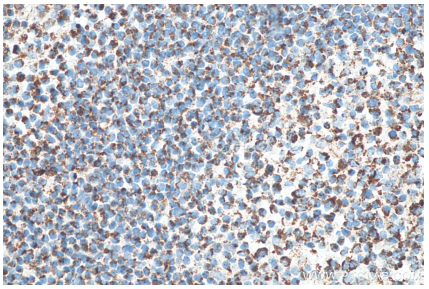
Selected Validation Data



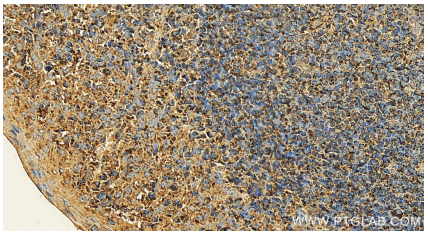
Various lysates were subjected to SDS PAGE followed by western blot with 60042-1-Ig (CXCR4 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 60042-1-Ig (CXCR4 antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 60042-1-Ig (CXCR4 antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 60042-1-Ig (CXCR4 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).