

For Research Use Only

STAT4 Monoclonal antibody

Catalog Number: 67568-2-Ig **2 Publications**



Basic Information

Catalog Number: 67568-2-Ig	GenBank Accession Number: BC031212	Purification Method: Protein G purification
Size: 150ul , Concentration: 2000 ug/ml by Nanodrop and 978 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 6775	CloneNo.: 4A8C9
Source: Mouse	UNIPROT ID: Q14765	Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:250-1:1000 IF/ICC: 1:50-1:500 FC (Intra): 0.40 ug per 10 ⁶ cells in a 100 µl suspension
Isotype: IgG1	Full Name: signal transducer and activator of transcription 4	
Immunogen Catalog Number: AG19545	Calculated MW: 748 aa, 86 kDa	
	Observed MW: 86 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, FC (Intra), ELISA	Positive Controls: WB : HeLa cells, 4T1 cells, HEK-293 cells, HepG2 cells, Jurkat cells, MOLT-4 cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells IHC : human breast cancer tissue, human cervical cancer tissue IF/ICC : HepG2 cells, FC (Intra) : HepG2 cells,
Cited Applications: WB, IHC, IF	
Species Specificity: human, mouse, rat	
Cited Species: mouse, rat	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

The JAK/STAT pathway is an extensive signaling pathway downstream of cytokine receptors. STATs are cytosolic proteins with a common structure consisting of an N-terminal oligomerization domain, which favors formation of STAT dimers, followed by a DNA-binding domain and a C-terminal SRC homology-2 (SH2) domain, which is involved in association between STATs and receptors[PMID:22383755]. Signal Transducer and Activator of Transcription 4 (STAT4) is a transcription factor that is activated by IL-12 signaling and promotes Th1-cell differentiation and IFN-γ production [PMID:21998209].

Notable Publications

Author	Pubmed ID	Journal	Application
Jiannan Zhou	38574973	Free Radic Biol Med	IF
Xi-Yun Liu	37875707	Mol Neurobiol	WB,IHC

Storage

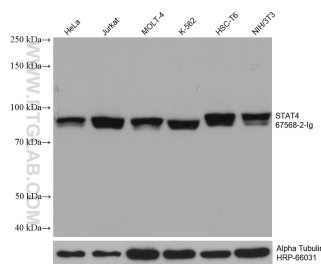
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

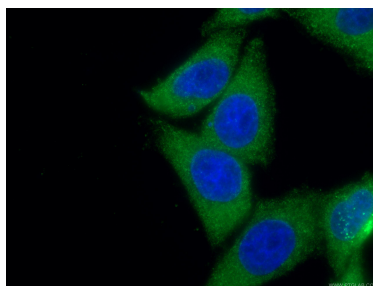
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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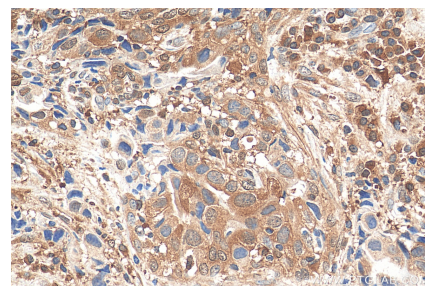
Selected Validation Data



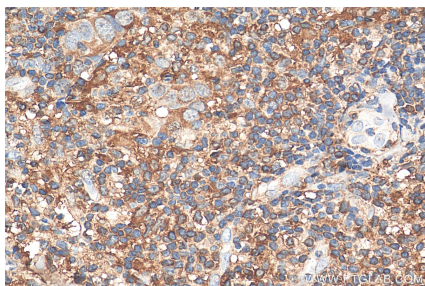
Various lysates were subjected to SDS PAGE followed by western blot with 67568-2-Ig (STAT4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



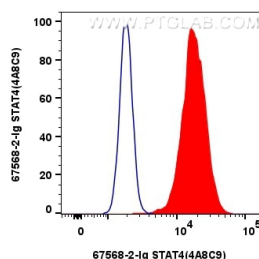
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 67568-2-Ig (STAT4 antibody), at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67568-2-Ig (STAT4 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67568-2-Ig (STAT4 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10⁶ HepG2 cells were intracellularly stained with 0.4 ug STAT4 Monoclonal antibody (67568-2-Ig, Clone:4A8C9) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1) (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).