

For Research Use Only

STAT2 Monoclonal antibody

Catalog Number: 66485-1-Ig 4 Publications



Basic Information

Catalog Number: 66485-1-Ig	GenBank Accession Number: BC051284	Purification Method: Protein A purification
Size: 150ul, Concentration: 1300 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 6773	CloneNo.: 1G12C4
Source: Mouse	Full Name: signal transducer and activator of transcription 2, 113kDa	Recommended Dilutions: WB 1:1000-1:4000 IHC 1:200-1:800 IF 1:400-1:1600
Isotype: IgG1	Calculated MW: 851 aa, 98 kDa	
Immunogen Catalog Number: AG10168	Observed MW: 113 kDa	

Applications

Tested Applications: IF, IHC, WB, ELISA	Positive Controls: WB : HeLa cells, A431 cells, A549 cells, PC-3 cells, COLO 320 cells IHC : human breast cancer tissue, IF : Ramos cells,
Cited Applications: IF, IP, WB	
Species Specificity: Human, mouse, rat	
Cited Species: human, mouse, pig	
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

STAT2, also named as p113, belongs to the transcription factor STAT family. It is a signal transducer and activator of transcription that mediates signaling by type I IFNs (IFN-alpha and IFN-beta). Following type I IFN binding to cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated STATs dimerize and associate with ISGF3G/IRF-9 to form a complex termed ISGF3 transcription factor, that enters the nucleus. ISGF3 binds to the IFN stimulated response element (ISRE) to activate the transcription of IF stimulated genes, which drive the cell in an antiviral state. It also interacts with CRSP2, CRSP6, Simian virus 5 protein V, rabies virus phosphoprotein, IFNAR1 and IFNAR2. Its interaction with dengue virus NS5 inhibits the phosphorylation of STAT2, and, when all viral proteins are present (polyprotein), STAT2 is targeted for degradation. The calculated molecular weight of STAT2 is 98 kDa, but phosphorylated STAT2 is about 100-113 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Huimin Liu	36315588	PLoS Pathog	WB,IP
Hanrui Yu	37931772	Exp Eye Res	WB
Qinyan Tang	37741128	Int Immunopharmacol	WB,IF

Storage

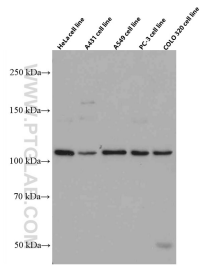
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

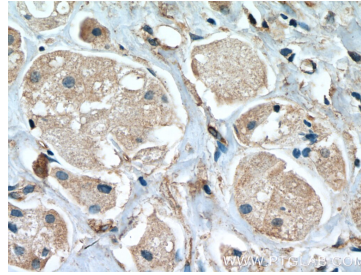
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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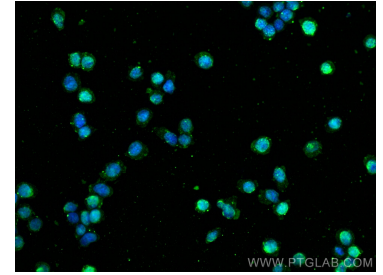
Selected Validation Data



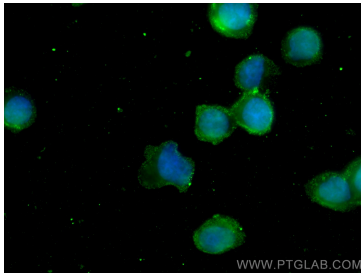
Various lysates were subjected to SDS PAGE followed by western blot with 66485-1-Ig (STAT2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66485-1-Ig (STAT2 antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed Ramos cells using STAT2 antibody (66485-1-Ig, Clone: 1G12C4) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed Ramos cells using STAT2 antibody (66485-1-Ig, Clone: 1G12C4) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).