For Research Use Only

STAT2 Polyclonal antibody

Catalog Number:16674-1-AP 25 Publications

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Basic Information

Catalog Number:
16674-1-AP

Concentration:
650 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG10168

GenBank Accession Number:
BC051284

GeneID (NCBI):
6773

UNIPROT ID:
P52630

Full Name:
signal transducer and activator of transcription 2, 113kDa

Calculated MW:
851 aa, 98 kDa

Observed MW:
113 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:20-1:200

Applications

Tested Applications:
WB, IHC, IP, ELISA

Cited Applications:
WB, IF, IP, CoIP

Species Specificity:
human

Cited Species:
human, mouse, pig, monkey

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 : A431 cells, K-562 cells, HT-1080 cells, HeLa cells

IP : HeLa cells,

IHC : human breast cancer tissue, human lung cancer tissue

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 IFN 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. This antibody is a rabbit polyclonal antibody raised against residues near the C terminus of human STAT2. The calculated molecular weight of STAT2 is 98 kDa, but phosphorylated STAT2 is about 100-113 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Orawan Wonganan	29031523	Toxicol Appl Pharmacol	WB
Xin Zong	33248053	Int J Biol Macromol	WB
Ighodaro Igbe	29371942	Oncotarget	WB

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

For technical support and original validation data for this product please contact:
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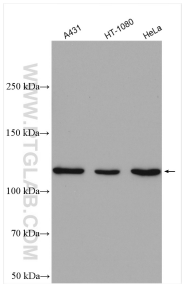
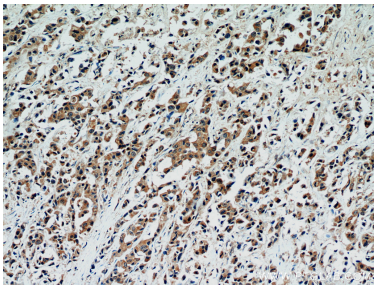
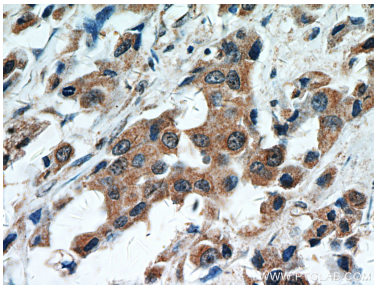
Selected Validation Data



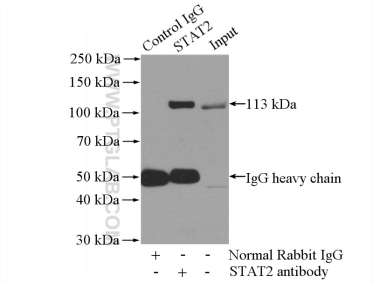
Various lysates were subjected to SDS PAGE followed by western blot with 16674-1-AP (STAT2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer using 16674-1-AP (STAT2 antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human breast cancer using 16674-1-AP (STAT2 antibody) at dilution of 1:50 (under 40x lens).



IP result of anti-STAT2 (IP:16674-1-AP, 4ug; Detection:16674-1-AP 1:500) with HeLa cells lysate 2800ug.