

Rabbit anti-Human, Rat STAT2 Polyclonal Antibody | anti-STAT2 antibody

STAT2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322345	Rabbit	Human, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

STAT2; Polyclonal Antibody; STAT2 Antibody; Homo sapiens interferon alpha induced transcriptional activator; interferon alpha induced transcriptional activator; ISGF 3; ISGF3; MGC59816; P113; signal transducer and activator of transcription 2 113kD; Signal transducer and activator of transcription 2; STAT113; Stat2; STAT2_HUMAN; anti-STAT2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	STAT2 antibody detects endogenous levels of total STAT2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	851
Applicable Applications for anti-STAT2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human STAT2
Subcellular Location	Cytoplasm. Nucleus. Translocated into the nucleus upon activation by IFN-alpha/beta.
Predicted Cross Reactivity	Pig, Horse, Dog
Similarity	Pig (82%), Horse (82%), Dog (91%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)

AAA322345 at 1/100 staining Human breast cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis of STAT2 expression in IFN treated HeLa whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA322345 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-STAT2 antibody	Description: The protein encoded by this gene is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. Function: 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, associate with IRF9/ISGF3G 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 interferon stimulated genes, which drive the cell in an antiviral state (PubMed:9020188, PubMed:23391734). Acts as a regulator of mitochondrial fission by modulating the phosphorylation of DNM1L at 'Ser-616' and 'Ser-637' which activate and inactivate the GTPase activity of DNM1L respectively (PubMed:26122121). Subunit Structure: Heterodimer with STAT1 upon IFN-alpha/beta induced phosphorylation (By similarity). The heterodimer STAT1:STAT2 forms the interferon-stimulated gene factor 3 complex (ISGF3) with IRF9; interacts with IRF9 in the cytoplasm (By similarity). Interacts with CRSP2 and CRSP6 (PubMed:12509459). Can form a homodimer upon IFN-alpha induced phosphorylation (PubMed:9020188). Interacts with IFNAR1; the interaction requires the phosphorylation of IFNAR1 at 'Tyr-466' (PubMed:9121453). Interacts with IFNAR2 (PubMed:9121453). Interacts with ARL2BP (By similarity). Interacts with E3 ubiquitin ligase DCST1; the interaction results in STAT2 ubiquitin-mediated proteasomal degradation (PubMed:27782195). Post-translational Modifications: Tyrosine phosphorylated in response to IFN-alpha. Phosphorylation at Ser-287 negatively regulates the transcriptional response.'Lys-48'-linked ubiquitination by DCST1 leads to STAT2 proteasomal degradation. Similarity: Belongs to the transcription factor STAT family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4885615
NCBI GeneID	6773
NCBI Accession #	NP_005410.1
NCBI GenBank Nucleotide #	NM_005419.3
UniProt Accession #	P52630; Q16430; Q16431; Q9UDL4; B4DLC7; G3V2M6
Molecular Weight	Observed: 113 kDa Predicted: 98 kDa
NCBI Official Full Name	signal transducer and activator of transcription 2 isoform 1
NCBI Official Synonym Full Names	signal transducer and activator of transcription 2
NCBI Official Symbol	STAT2
NCBI Official Synonym Symbols	P113; IMD44; ISGF-3; STAT113
NCBI Protein Information	signal transducer and activator of transcription 2
UniProt Protein Name	Signal transducer and activator of transcription 2
UniProt Gene Name	STAT2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/stat2-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/322345>