

Rabbit STAT1 Polyclonal Antibody | anti-STAT1 antibody

Phospho-STAT1 (Tyr68) Antibody

CATALOG # AAA328449	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Western Blot
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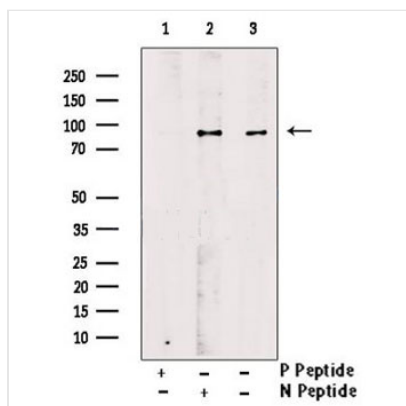
PRODUCT SYNONYMS

STAT1; Polyclonal Antibody; Phospho-STAT1 (Tyr68) Antibody; CANDF7; DKFZp686B04100; ISGF 3; ISGF3; OTTHUMP00000163552; OTTHUMP00000165046; OTTHUMP00000165047; OTTHUMP00000205845; Signal transducer and activator of transcription 1; 91kDa; Signal transducer and activator of transcription 1-alpha/beta; Stat1; STAT1_HUMAN; STAT91; Transcription factor ISGF-3 components p91/p84; anti-STAT1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-STAT1 (Tyr68) Antibody detects endogenous levels of STAT1 only when phosphorylated at Tyr68.
Purity/Purification	Purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
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	750
Applicable Applications for anti-STAT1 antibody	ELISA (Peptide ELISA), WB (Western Blot)
Immunogen	A synthesized peptide derived from human STAT1 around the phosphorylation site of Tyr68.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of extracts from Jurkat, using Phospho-STAT1 (Tyr68) Antibody. Lane1 was treated with phospho-blocking peptide, Lane2 was treated with non-phospho-blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-STAT1 antibody	Description: Signal transducer and transcription activator that mediates cellular responses to interferons (IFNs), cytokine KITLG/SCF and other cytokines and other growth factors. Following type I IFN (IFN-alpha and IFN-beta) binding to cell surface receptors, signaling via protein kinases leads to activation of Jak kinases (TYK2 and JAK1) and 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 (PubMed:28753426). ISGF3 binds to the IFN stimulated response element (ISRE) to activate the transcription of IFN-stimulated genes (ISG), which drive the cell in an antiviral state. In response to type II IFN (IFN-gamma), STAT1 is tyrosine- and serine-phosphorylated (PubMed:26479788). It then forms a homodimer termed IFN-gamma-activated factor (GAF), migrates into the nucleus and binds to the IFN gamma activated sequence (GAS) to drive the expression of the target genes, inducing a cellular antiviral state. Becomes activated in response to KITLG/SCF and KIT signaling. May mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4. Post Translational Modifications: Phosphorylated on tyrosine and serine residues in response to a variety of cytokines/growth hormones including IFN-alpha, IFN-gamma, PDGF and EGF. Activated KIT promotes phosphorylation on tyrosine residues and subsequent translocation to the nucleus. Upon EGF stimulation, phosphorylation on Tyr-701 (lacking in beta form) by JAK1, JAK2 or TYK2 promotes dimerization and subsequent translocation to the nucleus. Growth hormone (GH) activates STAT1 signaling only via JAK2. Tyrosine phosphorylated in response to constitutively activated FGFR1, FGFR2, FGFR3 and FGFR4. Phosphorylation on Ser-727 by several kinases including MAPK14, ERK1/2 and CAMKII on IFN-gamma stimulation, regulates STAT1 transcriptional activity. Phosphorylation on Ser-727 promotes sumoylation though increasing interaction with PIAS. Phosphorylation on Ser-727 by PRKCD induces apoptosis in response to DNA-damaging agents. Phosphorylated on tyrosine residues when PTK2/FAK1 is activated; most likely this is catalyzed by a SRC family kinase. Dephosphorylation on tyrosine residues by PTPN2 negatively regulates interferon-mediated signaling. Upon viral infection or IFN induction, phosphorylation on Ser-708 occurs much later than phosphorylation on Tyr-701 and is required for the binding of ISGF3 on the ISREs of a subset of IFN-stimulated genes IKBKE-dependent. Phosphorylation at Tyr-701 and Ser-708 are mutually exclusive, phosphorylation at Ser-708 requires previous dephosphorylation of Tyr-701. Sumoylated with SUMO1, SUMO2 and SUMO3. Sumoylation is enhanced by IFN-gamma-induced phosphorylation on Ser-727, and by interaction with PIAS proteins. Enhances the transactivation activity. ISGylated. Mono-ADP-ribosylated at Glu-657 and Glu-705 by PARP14; ADP-ribosylation prevents phosphorylation at Tyr-701. Monomethylated at Lys-525 by SETD2; monomethylation is necessary for phosphorylation at Tyr-701, translocation into the nucleus and activation of the antiviral defense. Similarity: Belongs to the transcription factor STAT family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	6274552
NCBI GeneID	6772
NCBI Accession #	NP_009330.1
NCBI GenBank Nucleotide #	NP_009330.1
UniProt Accession #	P42224
Molecular Weight	91kDa
NCBI Official Full Name	signal transducer and activator of transcription 1-alpha/beta isoform alpha
NCBI Official Synonym Full Names	signal transducer and activator of transcription 1
NCBI Official Symbol	STAT1
NCBI Official Synonym Symbols	CANDF7; IMD31A; IMD31B; IMD31C; ISGF-3; STAT91
NCBI Protein Information	signal transducer and activator of transcription 1-alpha/beta
UniProt Protein Name	Signal transducer and activator of transcription 1-alpha/beta
UniProt Gene Name	STAT1
UniProt Entry Name	STAT1_HUMAN

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/stat1-antibody-peptide-elisa-western-blot-elisa/328449>