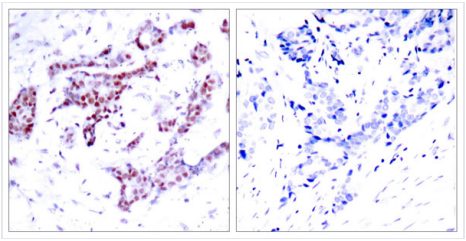
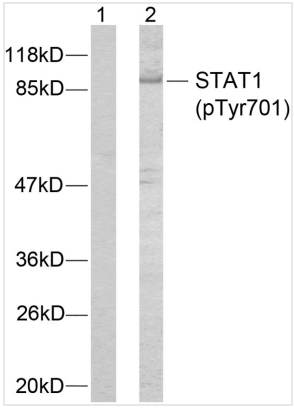
STAT1 Antibody

PRODUCT OVERVIEW

Product Name	STAT1, Antibody
Full Product Name	STAT1 (Phospho-Tyr701) Antibody
Product Gene Name	anti-STAT1 antibody
Species Reactivity	Human, Mouse, Rat
Form/Format	In phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	Affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Specificity	STAT1 (phospho-Tyr701) antibody detects endogenous levels of STAT1 only when phosphorylated at tyrosine 701.
Preparation and Storage	Store at-20 degree C for 1 year
Molecular Weight	83,043 Da
OMIM	600555
3D Structure	ModBase 3D Structure for P42224
Immunogen	The antiserum was produced against synthesized phosphopeptide derived from human STAT1 around the phosphorylation site of tyrosine 701 (T-G-YP-I-K).
Product Categories/Family for anti-STAT1 antibody	Autophagy antibody; Cancer; Cardiovascular; Cell Biology; Epigenetics & Nuclear Signaling; Developmental Biologys; Immunology; Drug Discovery Products; Metabolism; Neuroscience; Signal Transduction; Stem Cells
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-STAT1 antibody	Western Blot (WB), Immunohistochemistry (IHC)
Application Notes for anti-STAT1 antibody	WB: 1:500~1:1000 IHC: 1:50~1:100
Related Product Information for anti-STAT1 antibody	MBS856870 is an antibody targeting STAT1. Also known as STAT1 (Phospho-Tyr701) Antibody. Reactive in Human, Mouse, Rat.
Product References and Citations for anti-STAT1 antibody	Heim M H, (1999) J Recept Signal Transduct Res. 19: 75-120. Durbin J E, et al. (1996) Cell. 84: 443-450. Demoulin J, B. et al. (1999) J Biol Chem. 274: 25855-258. Ihle J N, et al. (1994) Trends Biochem Sci. 19: 222-227.
Other Notes	Small volumes of anti-STAT1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Immunohistochemistry (IHC) of anti-STAT1 antibody
P-Peptide-+ Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using STAT1 (phospho-Tyr701) antibody.



Western Blot (WB) of anti-STAT1 antibody
Western blot analysis of extracts from MCF7 cells using STAT1 (phospho-Tyr701) antibody.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for STAT1. It may not necessarily be applicable to this product.

NCBI GI #	6274552
NCBI GeneID	6772
NCBI Accession #	NP_009330.1
UniProt Primary Accession #	P42224
UniProt Secondary Accession #	Q53S88; Q53XW4; Q68D00; Q9UDL5; A8K989; B2RCA0; D2KFR8; D3DPI7
UniProt Related Accession #	P42224
GenBank Nucleotide #	NM_007315.3
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
UniProt Protein Name	Signal transducer and activator of transcription 1-alpha/beta
UniProt Synonym Protein Names	Transcription factor ISGF-3 components p91/p84
Protein Family	Signal transducer and activator of transcription
UniProt Gene Name	STAT1
NCBI Protein Information	signal transducer and activator of transcription 1-alpha/beta
NCBI Summary for STAT1	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. This protein can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens. Two alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008]

UniProt Comments for STAT1	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.
Research Articles on STAT1	**1.** 129:Stat1 (-/-) is a unique model for studying the critical origins and risk reduction strategies in age-related ER(+) breast cancer. In addition, it can be used in preclinical trials of hormonal and targeted therapies as well as immunotherapies.
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