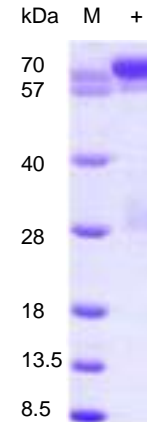


STAT1 (His-tagged), human recombinant

CATALOG NO. :	7889-10 10 µg 7889-25 25 µg
ALTERNATE NAMES:	Signal transducer and activator of transcription 1-alpha/beta, Transcription factor ISGF-3 components p91/p84, STAT1
SOURCE:	E. coli
PURITY:	>90% by SDS-PAGE.
MOL. WEIGHT:	85.2 kDa, confirmed by MALDI-TOF
FORM:	Liquid
CONCENTRATION:	0.5 mg/ml
FORMULATION:	20mM Tris-HCl buffer (pH8.0) containing 10% glycerol, 0.1M NaCl and 1mM DTT
STORAGE CONDITIONS:	Can be stored at +4°C for 1-2 weeks. For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

Becomes activated in response to KITLG/SCF and KIT signaling. May mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4.



The purity of Human STAT1 (His-tagged) was tested in SDS-PAGE and staining overnight with Coomassie Blue.

RELATED PRODUCTS:

- Stat1 Antibody (**Cat No. 3133R-100**)
- Stat1 Blocking Peptide (**Cat No. 3133RBP-50**)
- Phospho-Stat1 Antibody (**Cat No. 3467-100**)

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. 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. 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.

