

Product datasheet for TA385331

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

STAT1 Rabbit Monoclonal Antibody [Clone ID: R07-7A3]

Product data:

Product Type: Primary Antibodies

Clone Name: R07-7A3

Applications: IF, IP, WB

Recommended Dilution: WB: 1/2000-1/10000

ICC/IF: 1/500-1/1000

IP: 1/20

Reactivity: Human

Host: Rabbit

Isotype: IgG

Clonality: Monoclonal

Immunogen: A synthetic peptide of human STAT1

Formulation: 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA

Concentration: lot specific

Purification: Affinity Purified
Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Stability: 1 year

Predicted Protein Size: Calculated MW: 87 kDa; Observed MW: 87 kDa **Gene Name:** signal transducer and activator of transcription 1

Database Link: Entrez Gene 6772 Human

P42224





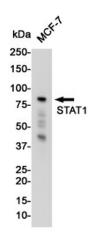
Background:

Swiss-Prot Acc.P42224.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.

Synonyms:

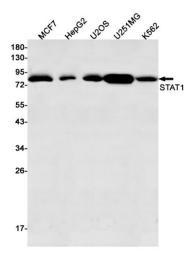
DKFZp686B04100; ISGF-3; OTTHUMP00000205845; STAT91

Product images:

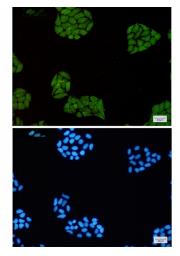


Western blot analysis of STAT1 in MCF-7 lysates using STAT1 antibody.





Western blot analysis of STAT1 in MCF-7, HepG2, U2OS, U251MG, K562 lysates using STAT1 antibody.



Immunocytochemistry analysis of STAT1(green) in Hela using STAT1 antibody,and DAPI(blue)