Anti-STAT1 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

Catalog # M014384

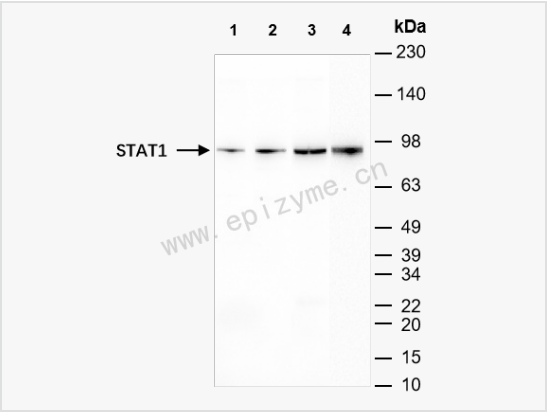
Product Information

Application	IF (Cell)/ICC, WB, ELISA
Reactivity	Human, Rat
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Mouse
Clonality	Monoclonal
Clone No.	37S70S39
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human STAT1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-STAT1 Mouse mAb [37S70S39] is for research use only and not for use in diagnostic or therapeutic procedures.

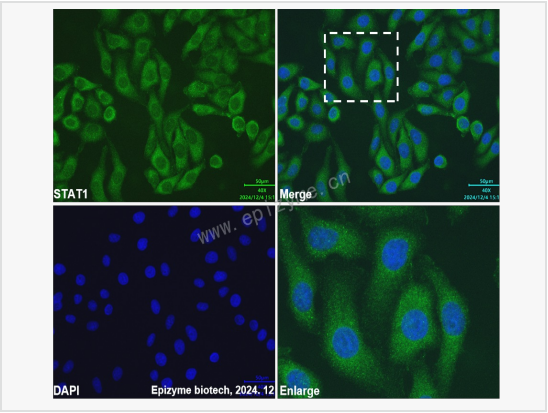
Protein Information

Synonyms	Signal transducer and activator of transcription 1 91kD, CANDF7, DKFZp686B04100, IMD31A, IMD31B, IMD31C, ISGF 3, ISGF-3, OTTHUMP00000163552, OTTHUMP00000165046, OTTHUMP00000165047, OTTHUMP00000205845, Signal transducer and activator of transcription 1 91kDa, Signal transducer and activator of transcription 1, Signal transducer and activator of transcription 1, 91kD, Signal transducer and activator of transcription 1-alpha/beta, STAT 1, Stat1, STAT1_HUMAN, STAT91, Transcription factor ISGF 3 components p91 p84, Transcription factor ISGF-3 components p91/p84, Transcription factor ISGF3 components p91/p84, XStat1.
Calculated MW	Calculated MW: 87 kDa; Observed MW: 87 kDa
Uniprot ID	P42224
Gene ID	6772
Background	The Stat1 transcription factor is activated in response to a large number of ligands and is essential for responsiveness to IFN-α and IFN-γ. Phosphorylation of Stat1 at Tyr701 induces Stat1 dimerization, nuclear translocation, and DNA binding. Stat1 protein exists as a pair of isoforms, Stat1α (91 kDa) and the splice variant Stat1β (84 kDa). In most cells, both isoforms are activated by IFN-α, but only Stat1α is activated by IFN-γ. The inappropriate activation of Stat1 occurs in many tumors. In addition to tyrosine phosphorylation, Stat1 is also phosphorylated at Ser727 through a p38 mitogen-activated protein kinase (MAPK)-dependent pathway in response to IFN-α and other cellular stresses. Serine phosphorylation may be required for the maximal induction of Stat1-mediated gene activation.
Cellular Location	Cytoplasm. Nucleus. Translocated into the nucleus in response to IFN-gamma-induced tyrosine phosphorylation and dimerization.

Validation Images



Western Blot - Anti-STAT1 Mouse mAb [37S70S39]
All lanes: M014384 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: Rat kidney whole tissue lysates
Lane 4: Rat spleen whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Mouse IgG(H+L), HRP Conjugated (Cat. No. LF101) at 1:5,000 dilution
Predicted band size: 87 kDa
Observed band size: 87 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-STAT1 Mouse mAb [37S70S39]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: M014384 at 1:100 dilution
Secondary antibodies: Goat anti-Mouse (488) at 1:1,000 dilution (shown in green)
Nuclei were stained with DAPI (shown in blue).