

STAT2 Antibody

Rabbit mAb Catalog # AP90866

Product Information

Application Primary Accession Reactivity Clonality Other Names	WB, IHC, IF, ICC, IHF <u>P52630</u> Rat, Human, Mouse Monoclonal Homo sapiens interferon alpha induced transcriptional activator; ISGF 3; P113; signal transducer and activator of transcription 2 113kD; STAT113; Stat2;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	97916

Additional Information

Dilution	WB 1:1000~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human STAT2
Description	STAT2 (113-kDa), originally purified from the nuclei of
	alpha-interferon-treated cells, is critical to the transcriptional responses
	induced by type I interferons, IFN-alpha/beta. Stat2 is rapidly activated by
	phosphorylation at Tyr690 in response to stimulation by IFN-alpha/beta via
	associations with receptor-bound Jak kinases
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium
	azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.
	Avoid freeze / thaw cycle.

Protein Information

Name

STAT2

FunctionSignal transducer and activator of transcription that mediates signaling by
type I interferons (IFN-alpha and IFN-beta). Following type I IFN binding to
cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to
tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated STATs
dimerize, associate with IRF9/ISGF3G 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 interferon
stimulated genes, which drive the cell in an antiviral state (PubMed:
23391734,
PubMed:
9020188). In addition, also has a negative feedback regulatory role in
the type I interferon signaling by recruiting USP18 to the type I IFN receptor
subunit IFNAR2 thereby mitigating the response to type I IFNs
(PubMed:
28165510). Acts as a regulator of mitochondrial fission by

	modulating the phosphorylation of DNM1L at 'Ser-616' and 'Ser-637' which activate and inactivate the GTPase activity of DNM1L respectively (PubMed: <u>23391734</u> , PubMed: <u>26122121</u> , PubMed: <u>9020188</u>).
Cellular Location	Cytoplasm. Nucleus Note=Translocated into the nucleus upon activation by IFN-alpha/beta
Images	

KDa

Western blot analysis of STAT2 expression in K562 cell



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