Affinity-Purified Rabbit Anti-phospho-STAT 1 (Y701) Antibody

Specificity: Mouse phospho-STAT 1 (Y701)		**Size: 0.1 mg**
Source: Rabbit		**IgG Type: rabbit IgG**

Background:
Signal transducer and activator of transcription that mediates signaling by interferons (IFNs). Following type I IFN (IFN-alpha and IFN-beta) binding cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylate STATs dimerize, associate with ISGF3G/IRF-9 to form a complex termed ISGF3 transcription factor, that enters the nucleus. ISGF3 binds to the IF stimulated response element (ISRE) to activate the transcription of interferon stimulated genes, which drive the cell in an antiviral state. In response type II IFN (IFN-gamma), STAT1 is tyrosine- and serine-phosphorylated. It then forms a homodimer termed IFN-gamma-activated factor (GAF), migrate 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.

Other Name: **Signal transducer and activator of transcription 1-alpha/beta**

Specificity:

Mouse: Positive

Application : **For western blot analysis, an antibody concentration of 1 µg/ml is recommended**

ELISA	**Positive**
Western blotting	**Positive 1 mg/ml**
Immunohistochemistry	**Positive**
Immunoprecipitation	**Positive**
Flow cytometry	**Positive**

Isotype: Rabbit IgG

Description: **This antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding the pho sites.**

Storage: **Upon reconstitution, maintain refrigerated at 2-8℃ for up to 6 months. For long term storage store at -20℃ to -70℃. Lyophilized samples are stable for twelve m the date of receipt when stored at -20℃ to -70℃**

Format: **Purified rabbit monoclonal antibody supplied in PBS with 0.02% (W/V) sodium azide. This antibody is first purified by protein G affinity chromatography. Then, th fraction is peptide affinity purified in a 2-step procedure with the control and phosphorylated peptides. The phospho-specific antibody is eluted with high and lo and neutralized immediately, followed by dialysis against PBS.**

Precautions: **This product is for research use only. Not for use in diagnostic or therapeutic procedures.**

References:

1. Basler C.F.; "Nipah virus V and W proteins have a common STAT1-binding domain yet inhibit STAT1 activation from the cytoplasmic and nu compartments, respectively.";J. Virol. 78:5633-5641(2004).
2. Casanova J.L.; "Impaired response to interferon-alpha/beta and lethal viral disease in human STAT1 deficiency."; Nat. Genet. 33:388-391(2003).
3. Casanova J.L.; "Impairment of mycobacterial but not viral immunity by a germline human STAT1 mutation."; Science 293:300-303(2001).

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