



STAT1 (Phospho-Tyr701) Antibody

#11044

Catalog Number: 11044-1, 11044-2

Amount: 50µg/50µl, 100µg/100µl

Swiss-Prot No. : P42224

Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Storage/Stability: Store at -20°C/1 year

Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human STAT1 around the phosphorylation site of tyrosine 701 (T-G-Y^P-I-K).

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

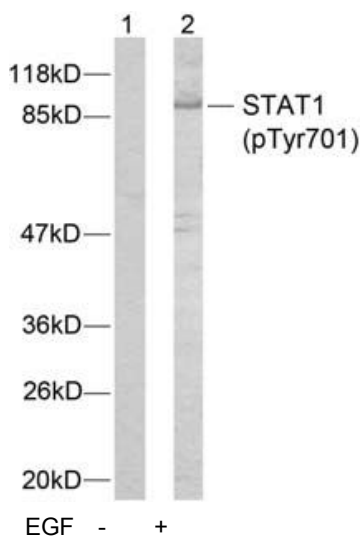
Specificity/Sensitivity: STAT1 (phospho-Tyr701) antibody detects endogenous levels of STAT1 only when phosphorylated at tyrosine 701

Reactivity: Human, Mouse, Rat

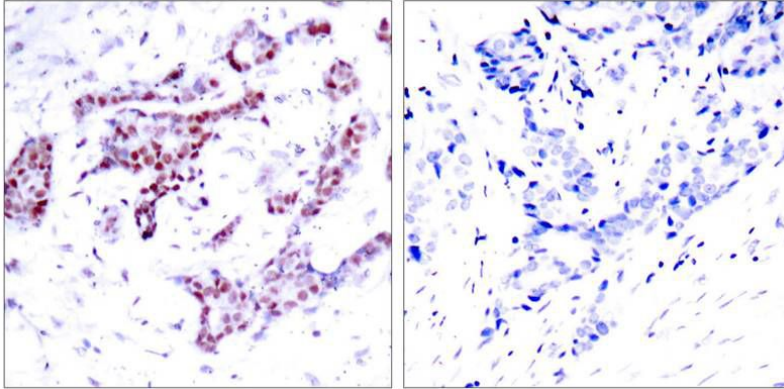
Applications:

Predicted MW: 91 kd

WB: 1:500~1:1000 IHC: 1:50~1:100



Western blot analysis of extracts from MCF7 cells using STAT1 (phospho-Tyr701) antibody (#11044).



P-Peptide - +

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using STAT1 (phospho-Tyr701) antibody (#11044).

Background :

Signal transducer and activator of transcription that mediates signaling by interferons (IFNs). Following type I IFN (IFN- α and IFN- β) 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 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 interferon stimulated genes, which drive the cell in an antiviral state. In response to type II IFN (IFN- γ), STAT1 is tyrosine- and serine-phosphorylated. It then forms a homodimer termed IFN- γ -activated factor (GAF), migrates into the nucleus and binds to the IFN γ activated sequence (GAS) to drive the expression of the target genes, inducing a cellular antiviral state

References:

Heim M H, (1999) J Recept Signal Transduct Res. 19: 75-120.

Durbin J E, et al. (1996) Cell. 84: 443-450.

Demoulin J, B. et al. (1999) J Biol Chem. 274: 25855-258.

Ihle J N, et al. (1994) Trends Biochem Sci. 19: 222-227.