STAT1(Phospho-Tyr701) Antibody

Catalog No: #11044

Package Size: #11044-1 50ul #11044-2 100ul #11044-4 25ul

Overview

Product Name	STAT1(Phospho-Tyr701) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Applications	WB IHC
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide-KLH
Target Name	STAT1
Modification	Phospho-Tyr701
Alternative Names	CANDF7, ISGF-3, STAT91

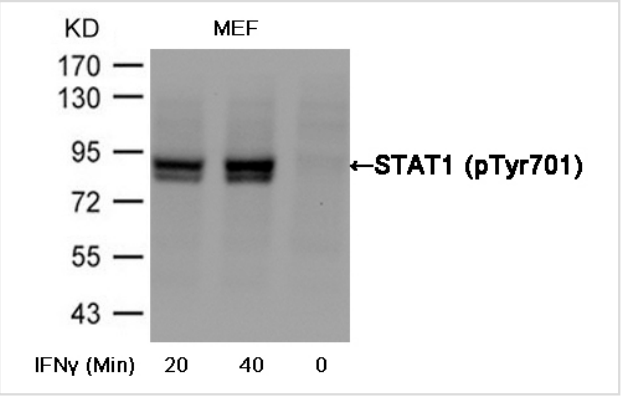
Application Details

Predicted MW: 84,91kd

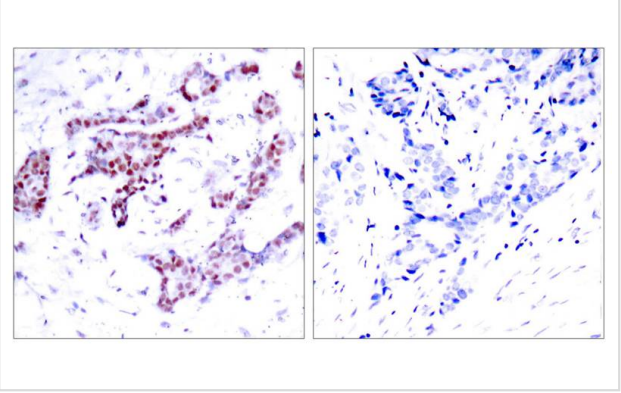
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

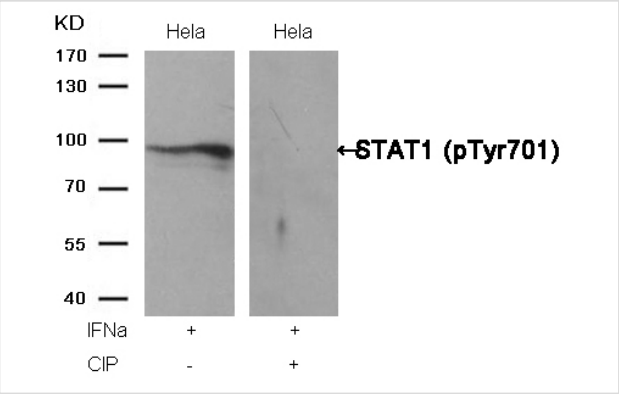
Images



Western blot analysis of extracts from MEF cells untreated or treated with interferon-I (IFNI) using STAT1 (Phospho-Tyr701) Antibody #11044.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using STAT1(Phospho-Tyr701) Antibody #11044(left) or the same antibody preincubated with blocking peptide(right).



Western blot analysis of extracts from Hela cells, treated with IFNa or calf intestinal phosphatase (CIP), using STAT1 (Phospho-Tyr701) Antibody #11044.

Descriptions

Specificity	The antibody detects endogenous level of STAT1 only when phosphorylated at tyrosine 701.
Purifiction	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.
Predicted MW	84,91kd
Accession NO.	Swiss-Prot: P42224NCBI Protein: NP _009330.1

Related Information

Signal transducer and activator of transcription that mediates signaling by interferons (IFNs). Following type I IFN (IFN-a and IFN-beta) 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-gamma), STAT1 is tyrosine- and serine-phosphorylated. 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.

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Meraz M A, et al. (1996) Cell. 84: 431-442.
Wakao H, et al. (1994) EMBO J. 13: 2182-2191.
Demoulin J, B. et al. (1999) J Biol Chem. 274: 25855-258
Ihle J N, et al. (1994) Trends Biochem Sci. 19: 222-227.

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C.-C.E. Lan, C.-S. Wu, S.-M. Huang el at., High-glucose environment reduces human b-defensin-2 expression in human keratinocytes: implications for poor diabetic wound healing., British Association of Dermatologists, 166(6):1221B¨C1229(2012)

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Hirokazu Hara, Yoko Nakamura, Masayuki Ninomiya el at., Inhibitory effects of chalcone glycosides isolated from?Brassica rapa?L. B‘B hidabeniB‘B— and their synthetic derivatives on LPS-induced NO production in microglia., Bioorganic & Medicinal Chemistry, 19(18):5559-5568(2011)

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Hsin-Chien Chen, Hsin-I Ma, Huey-Kang Sytwu el at., Neural Stem Cells Secrete Factors That Promote Auditory Cell Proliferation Via a Leukemia

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PMID:20686047

Note: This product is for in vitro research use only and is not intended for use in humans or animals.