

AbboMax, Inc

Innovation at Work

Rabbit anti- STAT1 (Paired Y701, Non-phospho)

Synonym: Signal transducer and activator of transcription 1 (STAT1)

ANTIGEN PREPARATION

A synthetic peptide surrounding to the epitope -TGYIK—without phosphorylation sites at Tyr701 of STAT1 protein from human, mouse and rat origins.

BACKGROUND

STAT proteins (Signal transducer and activator of transcription) belong to a family of cytoplasmic transcription factors that can be phosphorylated by a ligand binding to its cell surface receptor. The phosphorylation of STAT1 at Tyr701 induces STAT1 dimerization, nuclear translocation and DNA binding. STAT 1 is activated by a number of different ligands, including IFN, EGF, PDGF and IL6. Tyrosine 701 phosphorylation impairment results in loss of STAT 1 functions.

PURIFICATION

The Rabbit IgG is purified by epitope Affinity Purification.

SPECIFICITY

This antibody recognizes STAT1 without a phosphorylated sites of Tyr701. It does not cross-react with phosphospecific peptide.

APPLICATIONS/SUGGESTED WORKING DILUTIONS

Western Blot	0.1-1 µg/ml
ELISA	0.01-0.1 µg/ml
Immunoprecipitation	2-5 µg/ml
IHC	1:50 µg/ml
Flow cytometry	Not tested

FORMULATION

This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing antibody stabilizer

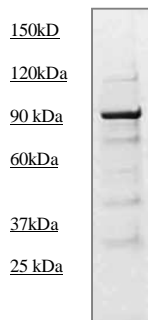
STORAGE

The antibodies are stable for 12 months from date of receipt when stored at -20°C to -70°C. The antibodies can be stored at 2°C-8°C for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

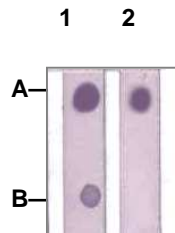
MOLECULAR WEIGHT:	91 kDa
POSITIVE CONTROL:	Mouse liver
CELLULAR LOCATION:	Nuclear

Optimal dilutions should be determined by researchers for the specific applications.

DATA ATTACHMENTS



Western Blot: The tissue lysate derived from mouse liver was immunoblotted by Rabbit anti STAT1 (Paired Y701) (Cat#620-170) antibody at 1:500.



Dot Blot:

1 µg peptide was blot onto NC membrane

A: STAT1 (pY701) (Phosphospecific)

B: STAT1 (PairedY701) (Non phosphospecific)

were blotted at a 1:2000 dilution by:

1: Rabbit anti-STAT1 (Paired Y701) (Cat#620-170),

2: Rabbit anti-STAT1 (Phosphospecific), (Cat#620-160).

REFERENCES

Tong R Wu, et al. SHP-2 Is a Dual-specificity Phosphatase Involved in Stat1 Dephosphorylation at Both Tyrosine and Serine Residues in Nuclei, J. Biol. Chem., Vol. 277, Issue 49, 47572-47580, December 6, 2002

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