

Stat1 polyclonal antibody

Catalog: BCP01567

Host: Rabbit

Reactivity: Human, Mouse, Rat

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.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

~ 87 kDa

Swiss-Prot:

P42224

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:500~1:1000

IF: 1:50~1:200

IHC: 1:50~1:200

IP: 1:50~1:200

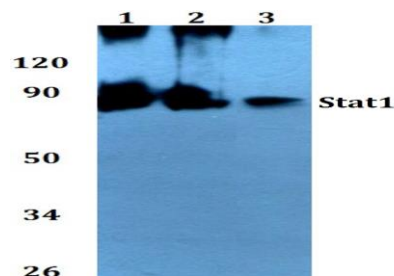
Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

Specificity:

Stat1 polyclonal antibody detects endogenous levels of

Stat1 protein.

DATA:

Western blot (WB) analysis of Stat1 polyclonal antibody at 1:1000 dilution

Lane1:NIH-3T3) whole cell lysate(40 μ g)

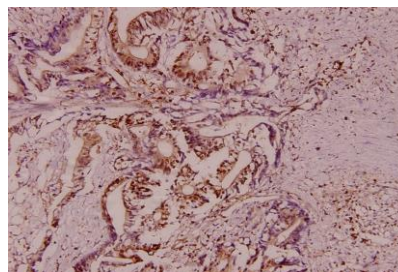
Lane2:NIH-3T3 treated with UV(4h) whole cell lysate(40 μ g)

Lane3:NIH-3T3 treated with PMA(60ng/ml, 30min) whole cell lysate(40 μ g)

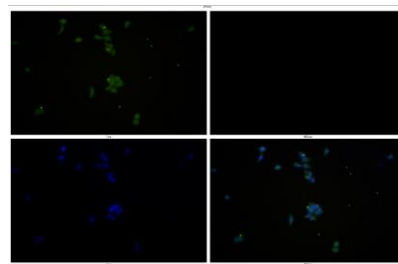
Lane4:Hela whole cell lysate(40 μ g)

Lane5:Hela treated with IFN- γ (100ng/ml,15min) whole cell lysate(40 μ g)

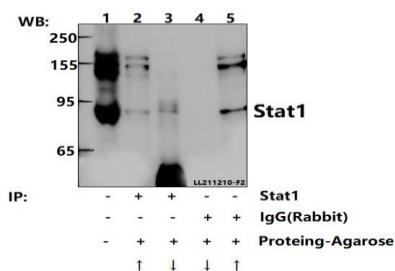
Lane6:Hela treated with PMA(60ng/ml, 30min) whole cell lysate(40 μ g)



Immunohistochemistry (IHC) analyzes of Stat1 pAb in paraffin-embedded human colorectal cancer carcinoma tissue at 1:100.



Immunofluorescence analysis of MCF-7 cells using Stat1 antibody at dilution of 1:50.

**Note:**

For research use only, not for use in diagnostic procedure.

Immunoprecipitation of HEK293T cell lysates using Stat1 pAb (Seph-
pharose Bead Conjugate)#BD0048 (lane 2 and lane 3) and Nonspecific
IgG Control (Seph-
pharose Bead Conjugate)#BD0048 (lane 4 and lane
5). Lane 1 is 30% input. The western blot was probed using Stat1 pAb.