For Research Use Only

STAT2 Recombinant antibody

Catalog Number:80061-5-RR



Purification Method:

Protein A purification

Recommended Dilutions:

WB 1:5000-1:50000

CloneNo.:

242685A1

Basic Information

Catalog Number: GenBank Accession Number:

80061-5-RR BC051284 GeneID (NCBI):

100ul , Concentration: 1000 $\mu g/ml$ by 6773 Nanodrop: **UNIPROT ID:** P52630

Rabbit Full Name:

Isotype: signal transducer and activator of

transcription 2, 113kDa IgG

Immunogen Catalog Number: Calculated MW: AG10168 851 aa, 98 kDa

> Observed MW: 110 kDa

Applications

Tested Applications:

WB, ELISA

Species Specificity:

human

Positive Controls:

WB: A549 cells, HeLa cells, A431 cells

Background Information

STAT2, also named as p113, belongs to the transcription factor STAT family. It is a signal transducer and activator of transcription that mediates signaling by type I IFNs (IFN-alpha and IFN-beta). Following type I IFN binding to cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated STATs dimerize and 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 IF stimulated genes, which drive the cell in an antiviral state. It also interacts with CRSP2, CRSP6, Simian virus 5 protein V, rabies virus phosphoprotein, IFNAR1 and IFNAR2. Its interaction with dengue virus NS5 inhibits the phosphorylation of STAT2, and, when all viral proteins are present (polyprotein), STAT2 is targeted for degradation. The calculated molecular weight of STAT2 is 98 kDa, but phosphorylated STAT2 is about 100-113

Storage

Store at -20°C. Stable for one year after shipment.

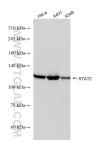
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

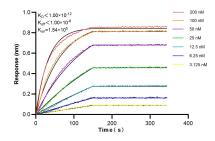
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 80061-5-RR (STAT2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLL) kinetic assays of 80061-5-RR against Human STAT2 were performed. The affinity constant is below 1 pM.