## 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: 80061-5-RR

 80061-5-RR
 BC051284

 Concentration:
 GeneID (NCBI):

 1000  $\mu$  g/ml
 6773

 Source:
 UNIPROT ID:

 Rabbit
 P52630

Isotype: Full Name:
IgG signal transducer and activator of

Immunogen Catalog Number: transcription 2, 113kDa AG10168 Calculated MW:

851 aa, 98 kDa Observed MW:

Tested Applications: Positive Controls:

110 kDa

WB, ELISA WB: A549 cells, HeLa cells, A431 cells Species Specificity:

GenBank Accession Number:

**Applications** 

Species human

## **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 kDa

Storage

Storage:

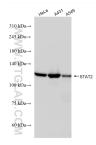
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

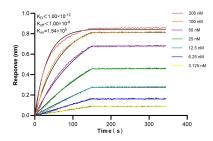
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

## 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.