

# **Stat2 Blocking Peptide**

Catalog # PBV10197b

## **Specification**

# **Stat2 Blocking Peptide - Product Information**

Primary Accession P52630
Other Accession CAE45713.1
Gene ID 6773
Calculated MW 97916

# Stat2 Blocking Peptide - Additional Information

**Gene ID 6773** 

Application & Usage The peptide is used for blocking the

antibody activity of Stat2. It usually blocks

the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for

30-60 minutes at 37°C.

#### **Other Names**

Signal transducer and activator of transcription 2, p113, STAT2

# Target/Specificity

Stat2

### **Formulation**

 $50~\mu g$  (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

# **Reconstitution & Storage**

-20 °C

# **Background Descriptions**

## **Precautions**

Stat2 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

## **Stat2 Blocking Peptide - Protein Information**

## Name STAT2

# **Function**

Signal transducer and activator of transcription that mediates signaling by type I interferons (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, associate with IRF9/ISGF3G 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 (PubMed:<a href="http://www.uniprot.org/citations/9020188"">http://www.uniprot.org/citations/9020188</a>"

target="\_blank">9020188</a>, PubMed:<a href="http://www.uniprot.org/citations/23391734" target="\_blank">23391734</a>). In addition, has also a negative feedback regulatory role in the type I interferon signaling by recruiting USP18 to the type I IFN receptor subunit IFNAR2 thereby mitigating the response to type I IFNs (PubMed:<a

href="http://www.uniprot.org/citations/28165510" target="\_blank">28165510</a>). Acts as a regulator of mitochondrial fission by modulating the phosphorylation of DNM1L at 'Ser-616' and 'Ser-637' which activate and inactivate the GTPase activity of DNM1L respectively (PubMed:<a href="http://www.uniprot.org/citations/26122121" target="\_blank">26122121</a>, PubMed:<a href="http://www.uniprot.org/citations/23391734" target="\_blank">23391734</a>, PubMed:<a href="http://www.uniprot.org/citations/9020188" target="\_blank">9020188</a>).

## **Cellular Location**

Cytoplasm. Nucleus Note=Translocated into the nucleus upon activation by IFN-alpha/beta

# Stat2 Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Stat2 Blocking Peptide - Images