

STAT2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP1532a**Specification**

STAT2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P52630](#)**STAT2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 6773**Other Names**

Signal transducer and activator of transcription 2, p113, STAT2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1532a](/product/products/AP1532a) was selected from the C-term region of human STAT2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

STAT2 Antibody (C-term) 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: [9020188](http://www.uniprot.org/citations/9020188), PubMed: [23391734](http://www.uniprot.org/citations/23391734)). 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: [28165510](http://www.uniprot.org/citations/28165510)). 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:26122121, PubMed:23391734, PubMed:9020188).

Cellular Location

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

STAT2 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

STAT2 Antibody (C-term) Blocking Peptide - Images

STAT2 Antibody (C-term) Blocking Peptide - Background

STAT2 is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. In response to interferon (IFN), this protein forms a complex with STAT1 and IFN regulatory factor family protein p48 (ISGF3G), in which this protein acts as a transactivator, but lacks the ability to bind DNA directly. Transcription adaptor P300/CBP (EP300/CREBBP) has been shown to interact specifically with this protein, which is thought to be involved in the process of blocking IFN-alpha response by adenovirus.

STAT2 Antibody (C-term) Blocking Peptide - References

Rodriguez, J.J., et al., J. Virol. 77(21):11842-11845 (2003).Gotoh, B., et al., J. Virol. 77(6):3360-3370 (2003).Saleh, A.Z., et al., Biochemistry 41(37):11261-11268 (2002).Rodriguez, J.J., et al., J. Virol. 76(22):11476-11483 (2002).Stewart, M.D., et al., Biol. Reprod. 66(2):393-400 (2002).