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STAT2 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP13749a

Specification

STAT2 Antibody (N-term) Blocking peptide - Product Information

Primary Accession P52630

STAT2 Antibody (N-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 AP13749a was selected from the N-term region of 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 (N-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, PubMed: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). 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 (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

STAT2 Antibody (N-term) Blocking peptide - Images

STAT2 Antibody (N-term) Blocking peptide - Background

The protein encoded by this gene is a member of the STATprotein family. In response to cytokines and growth factors, STATfamily members are phosphorylated by the receptor associatedkinases, and then form homo- or heterodimers that translocate tothe cell nucleus where they act as transcription activators. Inresponse to interferon (IFN), this protein forms a complex withSTAT1 and IFN regulatory factor family protein p48 (ISGF3G), inwhich this protein acts as a transactivator, but lacks the abilityto bind DNA directly. Transcription adaptor P300/CBP (EP300/CREBBP)has been shown to interact specifically with this protein, which isthought to be involved in the process of blocking IFN-alpharesponse by adenovirus. Multiple transcript variants encodingdifferent isoforms have been found for this gene. [provided byRefSeq].

STAT2 Antibody (N-term) Blocking peptide - References

Silva, L.K., et al. Eur. J. Hum. Genet. 18(11):1221-1227(2010)Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Han, S., et al. Hum. Immunol. 71(7):727-730(2010)Lou, Y.J., et al. Zhonghua Yi Xue Yi Chuan Xue Za Zhi 27(3):255-258(2010)Rosas-Murrieta, N.H., et al. Virol. J. 7, 263 (2010) :