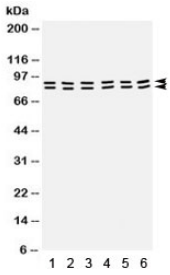
STAT1 Antibody (R32095)

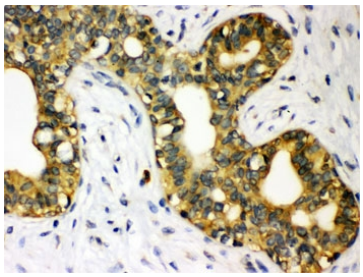
Catalog No.	Formulation	Size
R32095	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

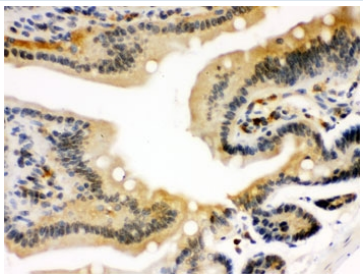
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P42224
Localization	Cytoplasmic
Applications	Western blot: 0.1-0.5ug/ml IHC (FFPE): 0.5-1ug/ml
Limitations	This STAT1 antibody is available for research use only.



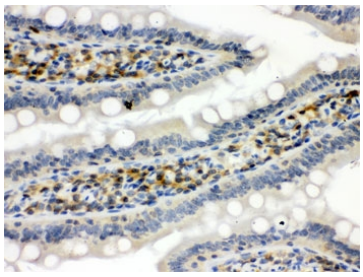
Western blot testing of rat 1) testis, 2) brain, 3) liver, and human 4) placenta, 5) MCF7, and 6) SW620 lysate with STAT1 antibody. Predicted/observed molecular weight: ~91/84 kDa (alpha/beta).



STAT1 Antibody Breast Cancer IHC. Immunohistochemistry staining of FFPE human breast cancer tissue using STAT1 antibody demonstrates strong cytoplasmic and membranous staining within neoplastic epithelial cells, consistent with expression of Signal Transducer and Activator of Transcription 1 (STAT1). STAT1 is a key transcription factor within the JAK-STAT signaling pathway that mediates cellular responses to interferons, cytokines, and growth factor-associated signaling networks. The observed staining pattern is consistent with the role of STAT1 in regulating transcriptional programs involved in immune responses, cellular differentiation, signal transduction, and tumor-associated signaling pathways. These findings support the utility of STAT1 antibody for studies of cytokine signaling, transcription factor biology, and cancer-related cellular regulation. HIER: boil paraffin sections in pH 6 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



STAT1 Antibody Mouse Intestine IHC. Immunohistochemistry staining of FFPE mouse intestine tissue using STAT1 antibody demonstrates prominent staining within intestinal epithelial cell populations, consistent with expression of Signal Transducer and Activator of Transcription 1 (STAT1). STAT1 is a central transcription factor within the JAK-STAT signaling pathway that mediates cellular responses to interferons, cytokines, and other extracellular signaling molecules. The observed staining pattern is consistent with the role of STAT1 in regulating immune signaling, epithelial homeostasis, and transcriptional responses to environmental and inflammatory stimuli within gastrointestinal tissues. These findings support the utility of STAT1 antibody for studies of signal transduction, cytokine-responsive pathways, and tissue-specific transcription factor expression. HIER: boil paraffin sections in pH 6 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



STAT1 Antibody Rat Intestine IHC. Immunohistochemistry staining of FFPE rat intestine tissue using STAT1 antibody demonstrates distinct staining within intestinal epithelial and mucosal-associated cell populations, consistent with expression of Signal Transducer and Activator of Transcription 1 (STAT1). STAT1 is a key transcription factor within the JAK-STAT signaling pathway that mediates cellular responses to interferons, cytokines, and immune regulatory signals. The observed staining pattern is consistent with the role of STAT1 in regulating transcriptional programs involved in epithelial homeostasis, immune surveillance, and cytokine-responsive signaling within gastrointestinal tissues. These findings support the utility of STAT1 antibody for studies of signal transduction, immune regulation, and tissue-specific gene expression. HIER: boil paraffin sections in pH 6 10mM citrate buffer for 20 minutes and allow to cool prior to staining.

Description

The crystal structure of the DNA complex of a 67-kD core fragment of the STAT1 homodimer was determined, lacking only the N-domain and the C-terminal transcriptional activation domain, at 2.9-angstrom resolution. Phosphorylation of Signal Transducer and Activator of transcription 1 (STAT 1) was also decreased in rheumatoid arthritis lymphocytes. The transcription factor signal transducer and activator of transcription-1 (STAT1) plays a key role in immunity against mycobacterial and viral infections. Activation of the signal transducers and activators of transcription (STAT) pathway is important in fibroblast growth factor (FGF) modulation of chondrocyte proliferation and endochondral bone formation during embryogenesis.

Learn more about STAT1 function, interferon signaling, and JAK-STAT pathway regulation on our STAT1 Antibody / JAK-STAT Pathway Transcription Factor page.

Application Notes

Optimal dilution of the STAT1 antibody should be determined by the researcher.

Immunogen

Amino acids KILENAQRFNQAQSGNIQSTVMLDKQKELD of human STAT1 were used as the immunogen for the STAT1 antibody.

Storage

After reconstitution, the STAT1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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