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Datasheet for ABIN7317337

**STAT1 Protein (GST tag,His tag)**

## Overview

|                               |  |
|-------------------------------|--|
| Quantity:                     | 100 µg   |
| Target:                       | STAT1  |
| Origin:                       | Human  |
| Source:                       | Baculovirus infected Insect Cells                    |
| Protein Type:                 | Recombinant  |
| Purification tag / Conjugate: | This STAT1 protein is labelled with GST tag,His tag. |

## Product Details

|                  |   |
|------------------|---|
| Purpose:         | Recombinant Human STAT1 Protein (His &GST Tag)  |
| Sequence:        | Met 1-Val 712   |
| Characteristics: | A DNA sequence encoding the human STAT1 isoform beta (P42224-2) (Met 1-Val 712) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus. |
| Purity:          | > 92 % as determined by reducing SDS-PAGE.  |
| Endotoxin Level: | < 1.0 EU per µg of the protein as determined by the LAL method.   |

## Target Details

|                   |  |
|-------------------|--|
| Target:           | STAT1  |
| Alternative Name: | STAT1 ( <a href="#">STAT1 Products</a> )   |
| Background:       | Background: STAT1 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 |

## Target Details

transcription activators. STAT1 can be activated by various ligands, including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. It is a signal transducer and transcription activator that mediates cellular responses to interferons (IFNs), cytokine KITLG/SCF and other cytokines and growth factors. The phosphorylated STATs dimerize, 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 interferon stimulated genes, which drive the cell in an antiviral state. In response to type II IFN (IFN-gamma), STAT1 is tyrosine- and serine-phosphorylated. It then forms a homodimer termed IFN-gamma-activated factor (GAF), migrates into the nucleus and binds to the IFN gamma activated sequence (GAS) to drive the expression of the target genes, inducing a cellular antiviral state. STAT1 becomes activated in response to KITLG/SCF and KIT signaling and may mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4. Defects in STAT1 can cause STAT1 deficiency complete and familial candidiasis type 7.

Synonym: Signal Transducer and Activator of Transcription 1-Alpha/Beta, Transcription Factor ISGF-3 Components p91/p84, STAT1, CANDF7,IMD31A,IMD31B,IMD31C,ISGF-3,STAT91

|                   |         |
|-------------------|---------|
| Molecular Weight: | 111 kDa |
|-------------------|---------|

|           |   |
|-----------|---|
| Pathways: | <a href="#">JAK-STAT Signaling</a> , <a href="#">RTK Signaling</a> , <a href="#">Interferon-gamma Pathway</a> , <a href="#">Response to Growth Hormone Stimulus</a> , <a href="#">Cellular Response to Molecule of Bacterial Origin</a> , <a href="#">Positive Regulation of Endopeptidase Activity</a> , <a href="#">Hepatitis C</a> , <a href="#">CXCR4-mediated Signaling Events</a> |
|-----------|---|

## Application Details

|               |                       |
|---------------|-----------------------|
| Restrictions: | For Research Use only |
|---------------|-----------------------|

## Handling

|         |             |
|---------|-------------|
| Format: | Lyophilized |
|---------|-------------|

|                 |  |
|-----------------|--|
| Reconstitution: | Please refer to the printed manual for detailed information. |
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|         |  |
|---------|--|
| Buffer: | Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 7.4 |
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|          |                    |
|----------|--------------------|
| Storage: | 4 °C,-20 °C,-80 °C |
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|                  |  |
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| Storage Comment: | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.<br>Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
|------------------|--|