

Datasheet for ABIN964699

## anti-STAT2 antibody (C-Term)



[Go to Product page](#)

### 1 Image

#### Overview

|                      |                                                          |
|----------------------|----------------------------------------------------------|
| Quantity:            | 100 µg                                                   |
| Target:              | STAT2                                                    |
| Binding Specificity: | C-Term                                                   |
| Reactivity:          | Human                                                    |
| Host:                | Mouse                                                    |
| Clonality:           | Monoclonal                                               |
| Application:         | Western Blotting (WB), ELISA, Immunohistochemistry (IHC) |

#### Product Details

|                             |                                                                                                                                                                                                                                                      |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purpose:                    | Stat2 Antibody                                                                                                                                                                                                                                       |
| Immunogen:                  | <p>Immunogen: This monoclonal antibody was produced by repeated immunizations with a synthetic peptide corresponding to residues near the carboxy terminus of mouse STAT2 protein.</p> <p>Immunogen Type: Conjugated Peptide</p>                     |
| Clone:                      | 19G8-H2-H6                                                                                                                                                                                                                                           |
| Isotype:                    | IgG2a kappa                                                                                                                                                                                                                                          |
| Cross-Reactivity (Details): | This Protein-A purified antibody is directed against human STAT2 protein. A BLAST analysis was used to suggest cross-reactivity with STAT2 protein from human, rat (73 % ) and mouse (76 %), sources based on homology with the immunizing sequence. |
| Characteristics:            | Synonyms: mouse anti-STAT2 antibody, Stat 2, Signal transducer and activator of transcription 2, p113                                                                                                                                                |

## Product Details

Purification: Protein A purified

Sterility: Sterile filtered

## Target Details

Target: STAT2

Alternative Name: Stat2 ([STAT2 Products](#))

Background: STAT2 is a member of the STAT family of transcription factors. Unlike other STATs, STAT2 is unique as it can only be activated by interferons (IFNs). STAT2 is a critical component in mediating many IFN-stimulated biological activities including antiproliferation and antiviral responses. Upon IFN treatment, STAT1 and STAT2 become tyrosine phosphorylated, assemble as heterodimers that bind IRF9 to form the ISGF3 complex. This complex translocates to the nucleus, binds to promoters of IFN-stimulated genes and mediates gene transcription. Consequently, mutations in STAT2 or loss of STAT2 expression leads to impairment in IFN signal transduction and gene activation. IFN-alpha is an approved drug for the treatment of several forms of cancer. Yet only a subset of patients who receive IFN-alpha therapy benefit from the treatment. Given that STAT2 is activated by IFNs, it is important to define if the reduced or lack of antitumor effects seen in cancer patients on IFN therapy is due to in defects in STAT2 function. Our goal is to identify regions/motifs within the structural domains of STAT2 that not only are essential for the tyrosine phosphorylation of STAT2, but also regulate the antitumor effects of IFN-alpha. Collectively, the results of our studies will emphasize the physiological role of STAT2 in cancer. From a clinical viewpoint, cancer patients who may benefit the most from receiving IFN-alpha therapy can be selected based on their STAT2 function.

Gene ID: 6773, 4885615

UniProt: [Q9WVL2](#)

Pathways: [JAK-STAT Signaling](#), [Hepatitis C](#), [CXCR4-mediated Signaling Events](#)

## Application Details

Application Notes: Immunohistochemistry Dilution: 1:2.5 µg/mL

Application Note: This Protein-A purified antibody has been tested for use in ELISA, immunohistochemistry, and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 113 kDa in size corresponding to STAT2 protein by western blotting in the appropriate cell lysate or extract.

## Application Details

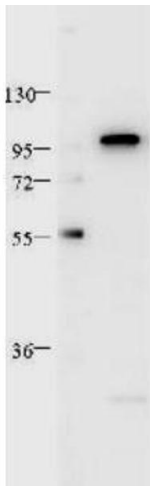
Western Blot Dilution: 1:1000  
ELISA Dilution: 1:5,000 - 1:10,000  
Other: User Optimized

Restrictions: For Research Use only

## Handling

|                    |                                                                                                                                                                                                                                                                                                                                               |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Format:            | Liquid                                                                                                                                                                                                                                                                                                                                        |
| Concentration:     | 1.0 mg/mL                                                                                                                                                                                                                                                                                                                                     |
| Buffer:            | Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2<br>Stabilizer: None<br>Preservative: 0.01 % (w/v) Sodium Azide                                                                                                                                                                                                             |
| Preservative:      | Sodium azide                                                                                                                                                                                                                                                                                                                                  |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.                                                                                                                                                                                                                        |
| Storage:           | 4 °C,-20 °C                                                                                                                                                                                                                                                                                                                                   |
| Storage Comment:   | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| Expiry Date:       | 12 months                                                                                                                                                                                                                                                                                                                                     |

## Images



### Western Blotting

**Image 1.** HeLa whole cell lysate was loaded at 1 µg. The blot was blocked with 1% BSA in TBST for 30 min at RT, then washed and incubated with anti-Stat2 antibody in 3% BSA/TBST at 1:1,000 overnight at 4C. After washing, blot was incubated with HRP Rb a-Ms IgG antibody in blocking buffer for 30 minutes at RT. Data was collected using Bio-Rad 4000 MP.