Datasheet for ABIN5596752

anti-STAT2 antibody (C-Term, pSer734)

1 Image

Go to Product page

Overview

Quantity:	100 µg
Target:	STAT2
Binding Specificity:	C-Term, pSer734
Reactivity:	Human, Monkey
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This STAT2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	Immunogen: STAT2 pS734 antibody was prepared from whole rabbit serum produced by repeated immunizations with a phosphorylated synthetic peptide corresponding to serine 734 a region near the C-terminus of human STAT2 protein. Immunogen Type: Peptide
Isotype:	IgG
Cross-Reactivity (Details):	This antibody is specific for phosphorylated S734 human STAT2. A BLAST analysis was used to suggest cross-reactivity with STAT2 pS734 protein from human and monkey sources based on homology with the immunizing sequence. Reactivity against homologues from other sources is not known.
Purification:	STAT2 pS734 affinity purified antibody is directed against human STAT2 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography.

Target Details

Target:	STAT2
Alternative Name:	STAT2 (STAT2 Products)
Background:	Synonyms: Signal transducer and activator of transcription 2, p113, STAT2 antibody 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. STAT2 pS734 antibody is ideal for researchers focused in cancer and transcripton factor research. Gene Name: STAT2
UniProt:	P52630
Pathways:	JAK-STAT Signaling, Hepatitis C, CXCR4-mediated Signaling Events

Application Details

Application Notes:	Application Note: Anti-STAT2 pS734 antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 97.9 kDa in size corresponding to STAT2pS734 protein by western blotting in the appropriate cell lysate or extract. Western Blot Dilution: 1:1,000 ELISA Dilution: 1:5,000
Restrictions:	For Research Use only

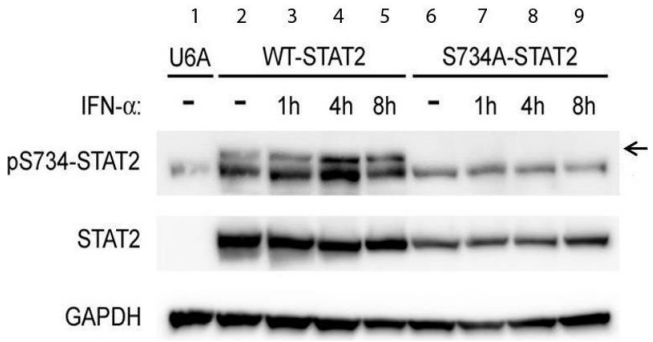
Handling

Format:	Liquid
Concentration:	0.64 mg/mL

Handling

Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None
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. Western Blot of Rabbit anti-STAT2pS734 antibody. Lane 1: U6A cells (STAT2 deficient) untreated. Lane 2: U6A cells reconstituted with STAT2 untreated. Lane 3: U6A cells, STAT2 treated with IFNα (1h). Lane 4: U6A cells, STAT2 + IFNα (4h). Lane 5: U6A cells, STAT2 + IFNα (8h). Lane 6: U6A cells reconstituted with S734A-STAT2 mutant untreated. Lane 7: U6A cells, S734A-STAT2 treated with IFNα (1h). Lane 8: U6A cells, S734A-STAT2 + IFNα (4h). Lane 9: U6A cells, S734A-STAT2 + IFNα (8h). Load: 20 µg per lane. Primary antibody: STAT2 pS734 antibody at 1:1000 for overnight at 4°C. Secondary antibody: rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 97.9 kDa, ~110 kDa for STAT2pS734. Other band(s): Non specific 100kDa, STAT2, GAPDH loading control.