Datasheet for ABIN6940669

anti-STAT3 antibody

3 Images

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Overview

Quantity:	100 µg
Target:	STAT3
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This STAT3 antibody is un-conjugated
Application:	Immunohistochemistry (IHC), Staining Methods (StM)

Product Details

Immunogen:	Recombinant human full-length STAT3 protein
Clone:	STAT3-2409
Isotype:	IgG2b kappa
Purification:	Purified by Protein A/G

Target Details

Target:	STAT3
Alternative Name:	STAT3 (STAT3 Products)
Background:	The specificity of this monoclonal antibody to its intended target was validated by HuProtTM Array, containing more than 19,000, full-length human proteins. STAT3 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

Target Details

	translocate to the cell nucleus where they act as transcription activators. This protein is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. This protein mediates the expression of a variety of genes in response to cell stimuli, and thus plays a key role in many cellular processes such as cell growth and apoptosis. The small GTPase Rac1 has been shown to bind and regulate the activity of this protein. PIAS3 protein is a specific inhibitor of this protein.
Molecular Weight:	88kDa
Gene ID:	6774
UniProt:	P40763
Pathways:	JAK-STAT Signaling, RTK Signaling, Interferon-gamma Pathway, Neurotrophin Signaling Pathway, Dopaminergic Neurogenesis, Response to Growth Hormone Stimulus, Carbohydrate Homeostasis, Stem Cell Maintenance, Hepatitis C, Protein targeting to Nucleus, Feeding Behaviour, CXCR4-mediated Signaling Events, Signaling of Hepatocyte Growth Factor Receptor

Application Details

Application Notes:	Positive Control: A431 and Raji cells. Kidney, Brain or Heart. Known Application: Immunohistochemistry (Formalin-fixed) (1-2 µg/mL for 30 min at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Restrictions:	For Research Use only

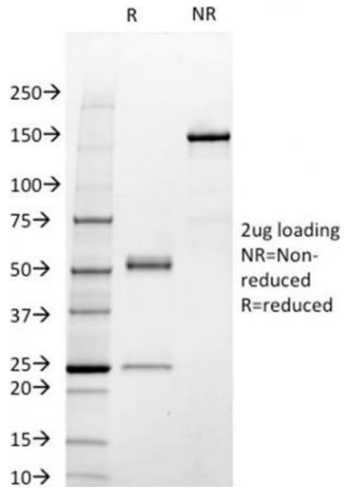
Handling

Concentration:	200 µg/mL
Buffer:	10 mM PBS with 0.05 % BSA & 0.05 % 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,-80 °C
Storage Comment:	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Handling

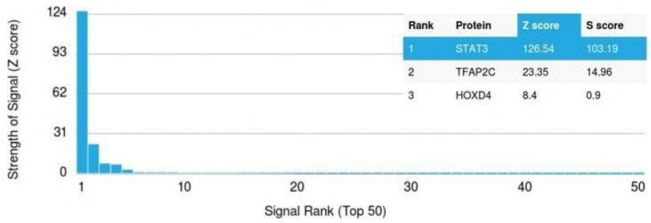
Expiry Date:	24 months

Images



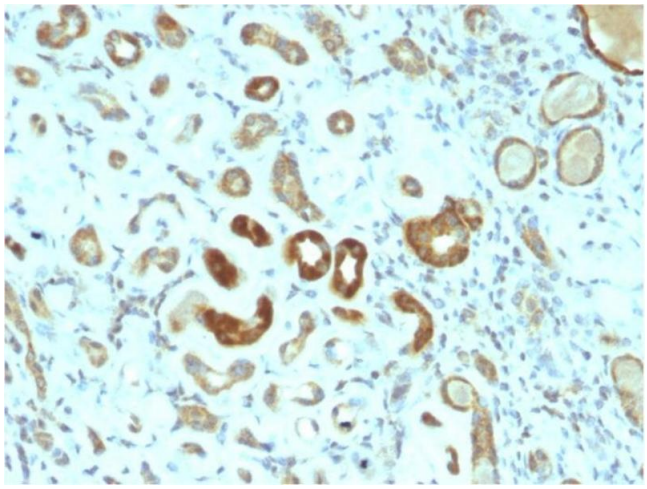
SDS-PAGE

Image 1. SDS-PAGE Analysis Purified STAT3 Mouse Monoclonal Antibody (STAT3/2409). Confirmation of Integrity and Purity of Antibody.



Protein Array

Image 2. Analysis of Protein Array containing more than 19,000 full-length human proteins using STAT3 Mouse Monoclonal Antibody (STAT3/2409). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SDs) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SDs) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.



Immunohistochemistry

Image 3. Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with STAT3 Mouse Monoclonal Antibody (STAT3/2409).