

STAT3 / Signal Transducer and Activator of Transcription 3 Antibody

Mouse Monoclonal Antibody [Clone STAT3/2409]

Catalog No	Format	Size
6774-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
6774-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
6774-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

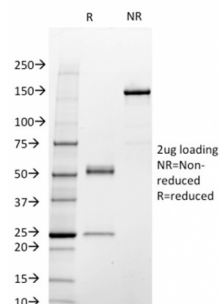
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

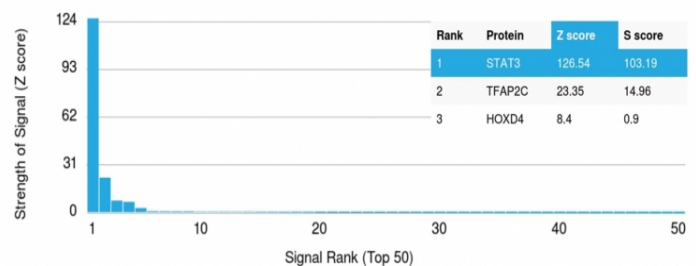
Clone	STAT3/2409
Gene Name	STAT3
Immunogen	Recombinant human full-length STAT3 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	88kDa
Cellular Localization	Cytoplasm, Nucleus
Species Reactivity	Human
Positive Control	A431 and Raji cells. Kidney, Brain or Heart.

*Optimal dilution for a specific application should be determined.

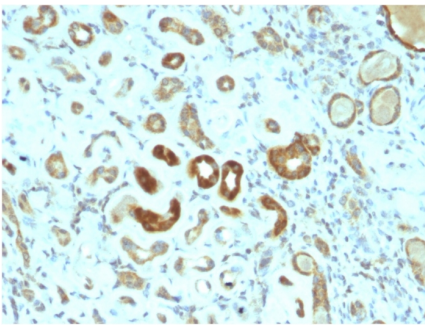
Product Images for STAT3 / Signal Transducer and Activator of Transcription 3 Antibody



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



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 HuProt™ array. Z-scores are described in units of standard deviations (SD, σ s) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD, σ s) 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 be 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.



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

Specificity & Comments

The specificity of this monoclonal antibody to its intended target was validated by HuProt™ 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 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.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

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.

Research Areas

Apoptosis, Autophagy, Cancer, Cardiovascular, Colon Cancer, Cytokine Signaling, Developmental Biology, Immunology, Infectious Disease, Neuroinflammation, PD-1 blockade immunotherapy, Signal Transduction, Stem Cell Differentiation