

## 36-3218: Anti-STAT3 / Signal Transducer and Activator of Transcription 3 Monoclonal Antibody(Clone: STAT3/2409)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	STAT3/2409
<b>Application :</b>	IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	STAT3
<b>Gene ID :</b>	6774
<b>Uniprot ID :</b>	P40763
<b>Alternative Name :</b>	APRF; HIES; ADMIO; ADMIO1
<b>Isotype :</b>	Mouse IgG2b, kappa
<b>Immunogen Information :</b>	Recombinant human full-length STAT3 protein

### Description

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.

### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/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.
<b>Storage condition :</b>	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.

### Application Note

Immunohistochemistry (Formalin-fixed) (1-2µg/ml for 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);

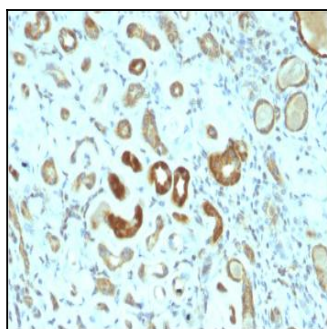


Fig. 1: Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with STAT3 Mouse Monoclonal Antibody (STAT3/2409).

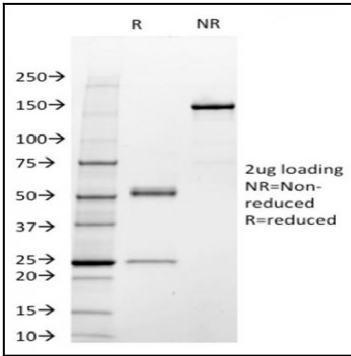


Fig. 2: SDS-PAGE Analysis Purified STAT3 Mouse Monoclonal Antibody (STAT3/2409). Confirmation of Integrity and Purity of Antibody.

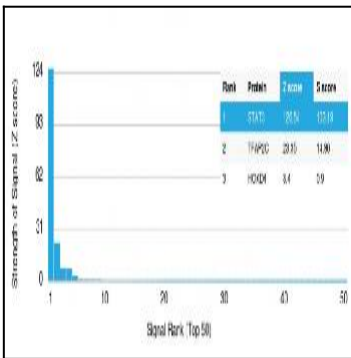


Fig. 3: Analysis of Protein Array containing more than 19,000 full-length human proteins using STAT3 Mouse Monoclonal Antibody (STAT3/2409). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD'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'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 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.