

## STAT6 (Solitary Fibrous Tumor Marker) Antibody

Mouse Monoclonal Antibody [Clone STAT6/2410]

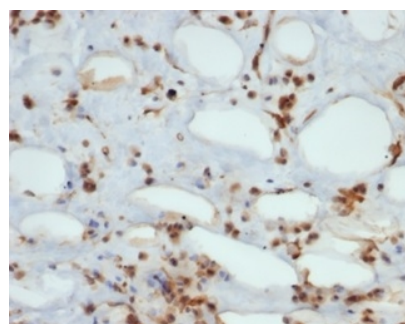
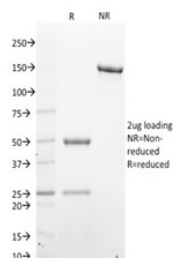
Catalog No	Format	Size
6778-MSM1-P0	Purified Ab with BSA and Azide	200ug/ml
6778-MSM1-P1	Purified Ab with BSA and Azide	200ug/ml
6778-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunofluorescence (IF)	1-3ug/ml
Immunohistochemistry (IHC)	1-2ug/ml
Western Blot (WB)	2-4ug/ml

Product Details	
Clone	STAT6/2410
Gene Name	STAT6
Immunogen	Recombinant full-length human STAT6 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	119kDa
Cellular Localization	Cytoplasm, Nucleus
Species Reactivity	Human
Positive Control	HeLa or HepG2 cells. Human kidney.

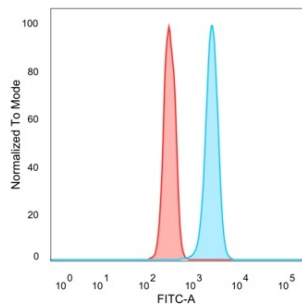
*\*Optimal dilution for a specific application should be determined.*

### Product Images for STAT6 (Solitary Fibrous Tumor Marker) Antibody

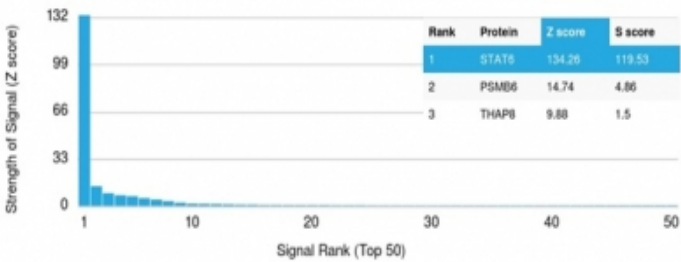


SDS-PAGE Analysis Purified STAT6 Mouse Monoclonal Antibody (STAT6/2410). Confirmation of Integrity and Purity of Antibody.

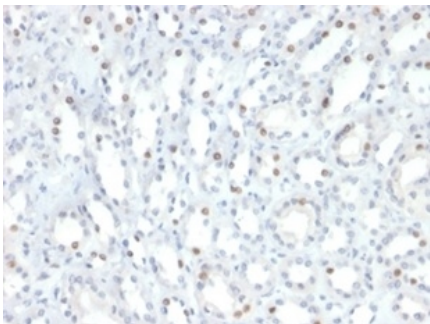
Formalin-fixed, paraffin-embedded human liposarcoma stained with STAT6 Mouse Monoclonal Antibody (STAT6/2410).



Flow cytometric analysis of PFA-fixed HeLa cells. STAT6 Mouse Monoclonal Antibody (STAT6/2410) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).



Analysis of Protein Array containing >19,000 full-length human proteins using STAT6-Monospecific Mouse Monoclonal Antibody (STAT6/2410) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (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 MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb 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 MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human renal cell carcinoma stained with STAT6 Mouse Monoclonal Antibody (STAT6/2410). HIER: Tris/EDTA, pH9.0, 45min. 2 °: HRP-polymer, 30min. DAB, 5min.

### Specificity & Comments

STAT6 is a transcription factor in the Jak/STAT signal transduction pathway responsible for mediating IL-4 immune signaling. STAT6 was recently suggested to be a reliable marker to distinguish solitary fibrous tumors from other soft tissue neoplasms. Gene fusions are common in solitary fibrous tumors. Recent next generation sequencing studies demonstrated the presence of a NAB2-STAT6 fusion, formed by an intrachromosomal inversion fusing two neighboring genes on chromosome 12q13, in 55-100% of solitary fibrous tumors, regardless of tumor morphology or anatomical site. By immunohistochemistry, nuclear STAT6 expression can discriminate solitary fibrous tumors from its morphological mimics in the meninges, including meningioma, glioblastoma, gliosarcoma, haemangioblastoma, schwannoma and haemangioma. A recent study by Cheah, et al. using the rabbit monoclonal STAT6 antibody (Clone YE361) observed expression in all solitary fibrous tumors (54/54) tested, regardless of histology, anatomical site or CD34 status. Morphological mimics of solitary fibrous tumors were negative, demonstrating 100% specificity.

### Research Areas

Cardiovascular, Immunology, Cytokine Signaling, Neuroinflammation, Signal Transduction

### Known Applications & Suggested Dilutions

Flow Cytometry (1-2ug/million cells) | Immunofluorescence (1-2ug/ml) | Western Blot (1-2ug/ml) | Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes 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), Optimal dilution for a specific application should be determined.

### 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.