

## Product Datasheet

### STAT6 Antibody (orb2641315)

<b>Catalog Number</b>	orb2641315
<b>Category</b>	Antibodies
<b>Description</b>	<p>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.</p>
<b>Clonality</b>	Monoclonal
<b>Species/Host</b>	Mouse
<b>Isotype</b>	Mouse IgG1, kappa
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human
<b>Buffer/Preservatives</b>	1 mg/ml in 1X PBS; rAlbumin free, sodium azide free
<b>Purification</b>	Protein G affinity chromatography

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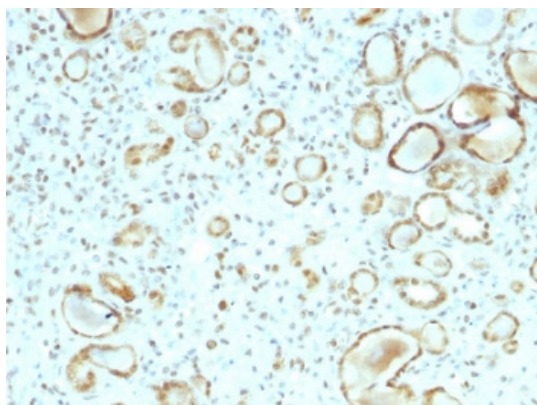
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<b>Immunogen</b>	Full length recombinant human protein was used as the immunogen for this STAT6 antibody.
<b>UniProt ID</b>	<b>P42226</b>
<b>Tested applications</b>	FACS, IHC-P
<b>Dilution range</b>	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT,Flow cytometry: 1-2ug/million cells
<b>Application notes</b>	Optimal dilution of the STAT6 antibody should be determined by the researcher.
<b>Antibody Type</b>	Primary Antibody
<b>Clone Number</b>	STAT6/2410
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Note</b>	For research use only
<b>Expiration Date</b>	12 months from date of receipt.



IHC staining of FFPE human renal cell carcinoma with STAT3 antibody (clone STAT6/2410). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.

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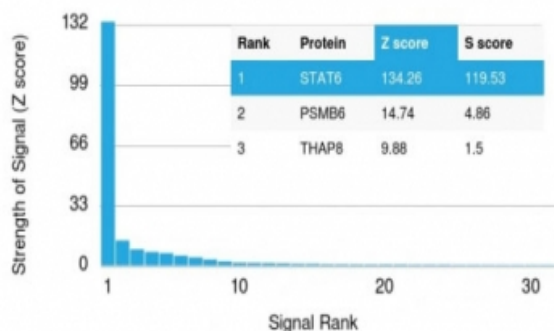
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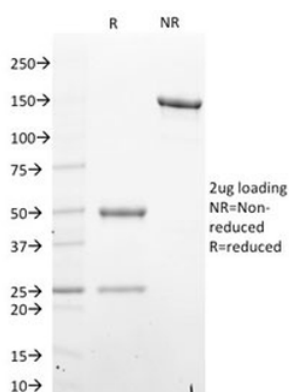
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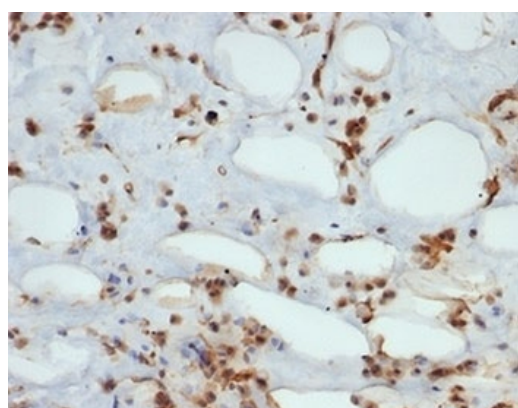
### Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19,000 full-length human proteins using STAT6 antibody (clone STAT6/2410). These results demonstrate the foremost specificity of the STAT6/2410 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free STAT6 antibody (clone STAT6/2410) as confirmation of integrity and purity.



IHC staining of FFPE human liposarcoma tissue with STAT3 antibody (clone STAT6/2410). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.

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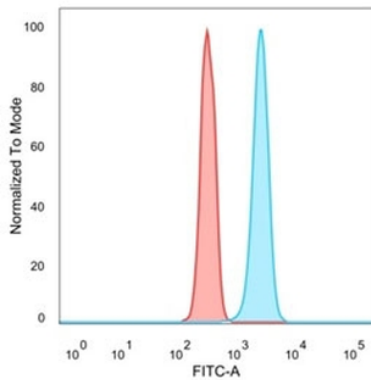
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Flow cytometry staining of PFA-fixed human HeLa cells with STAT6 antibody; Red = isotype control, Blue = STAT6 antibody.

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