## **STAT6 Monoclonal Mouse Antibody** (STAT6/2410)

BSA-free



## **Product Description**

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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Call us: 800-304-5357

Product attributes			
Antibody number	#2410		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
Antibody reactivity (target)	STAT6		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	STAT6/2410		
Isotype	IgG1, kappa		
Molecular weight	119 kDa		
Synonyms	IL4 STAT; Interleukin 4 Induced Transcription Factor IL4 STAT; Signal transducer and activator of transcription 6; STAT interleukin4 induced; STAT6; Transcription factor IL 4 STAT		
Human gene symbol	STAT6		
Entrez gene ID	6778		
SwissProt	P42226		
Unigene	524518		
Immunogen	Recombinant full-length human STAT6 protein		
Verified antibody applications	IHC (FFPE) (verified)		
Antibody target cellular	Nucleus & cytoplasm		
Species reactivity	Human		
Positive control	HeLa or HepG2 cells. Kidney		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C		
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0. mg/mL in PBS/0.05% BSA, Purified: 0 mg/mL in PBS/0.05% BSA/0.05% azid Purified, BSA-free: 1 mg/mL in PBS without azide		
Regulatory status	For research use only (RUO)		
Validated in protein array	Monospecific		
Tumor expression	Sarcoma		

Email: btinfo@biotium.com

Antibody # prefix BNC04	Conjugation CF®405S	Ex/Em (nm) 404/431	Laser line 405	Detection channel DAPI (microscopy), AF405	Dye Features CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, of LI-COR Bioscience.

This datasheet was generated on September 1, 2024 at 10:17:41 PM. Visit product page to check for updated information before use. Product link: https://biotium.com/product/stat6-monoclonal-mouse-antibody-stat6-2410