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STAT3 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant STAT3.
Catalog # AT4062a

Product Information

Application	WB, IF, E
Primary Accession	P40763
Other Accession	NM_003150
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	4D6
Calculated MW	88068

Additional Information

Gene ID	6774
Other Names	Signal transducer and activator of transcription 3, Acute-phase response factor, STAT3, APRF
Target/Specificity	STAT3 (NP_003141, 670 a.a. ~ 769 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	STAT3 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

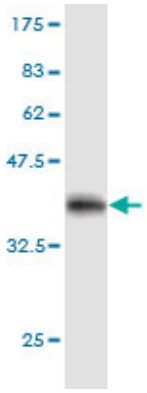
Background

The protein encoded by this gene 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. Three alternatively spliced transcript variants encoding distinct isoforms have been described.

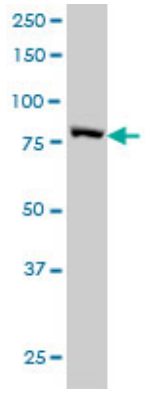
References

1.Acetylation Directs Survivin Nuclear Localization to Repress STAT3 Oncogenic Activity.Wang H, Holloway MP, Ma L, Cooper ZA, Riolo M, Samkari A, Elenitoba-Johnson KS, Chin YE, Altura RA.J Biol Chem. 2010 Nov 12;285(46):36129-37. Epub 2010 Sep 8.

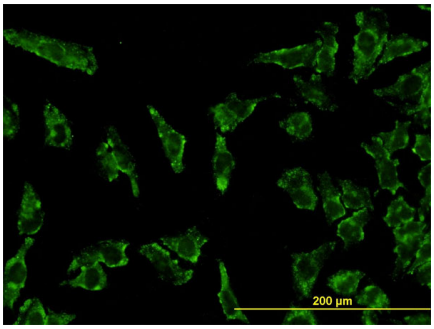
Images



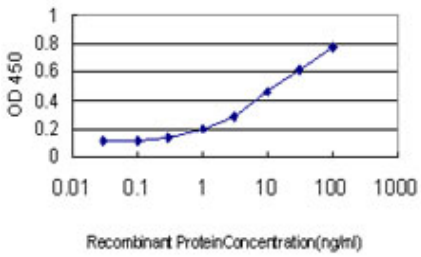
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



STAT3 monoclonal antibody (M02), clone 4D6 Western Blot analysis of STAT3 expression in HeLa ((Cat # AT4062a)

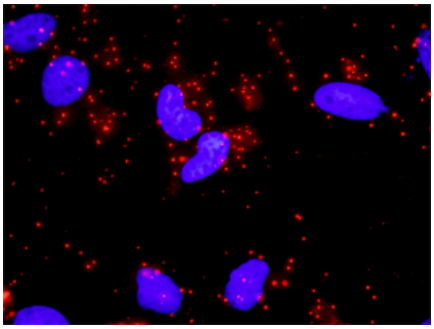


Immunofluorescence of monoclonal antibody to STAT3 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged STAT3 is approximately 0.1ng/ml as a capture antibody.

Proximity Ligation Analysis of protein-protein interactions between NFKB1 and STAT3 HeLa cells were stained with anti-NFKB1 rabbit purified polyclonal 1:1200 and anti-STAT3 mouse monoclonal antibody 1:50. Each red



dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.