

# STAT6 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant STAT6. Catalog # AT4067a

## **Product Information**

Application	WB, IHC, IF, E
Primary Accession	<u>P42226</u>
Other Accession	<u>BC004973</u>
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	6C10
Calculated MW	94135

## **Additional Information**

Gene ID	6778
Other Names	Signal transducer and activator of transcription 6, IL-4 Stat, STAT6
Target/Specificity	STAT6 (NP_003144, 694 a.a. ~ 801 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 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	STAT6 Antibody (monoclonal) (M01) 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 family of transcription factors. 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 plays a central role in exerting IL4 mediated biological responses. It is found to induce the expression of BCL2L1/BCL-X(L), which is responsible for the anti-apoptotic activity of IL4. Knockout studies in mice suggested the roles of this gene in differentiation of T helper 2 (Th2) cells, expression of cell surface markers, and class switch of immunoglobulins. Alternative splicing results in multiple transcript variants.

## References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.Genome-wide profiling of interleukin-4 and STAT6 transcription factor regulation of human Th2 cell programming. Elo LL, et al. Immunity, 2010 Jun 25. PMID 20620947.Discrete roles of STAT4 and STAT6 transcription factors in tuning epigenetic modifications and transcription during T helper cell differentiation. Wei L, et al. Immunity, 2010 Jun 25. PMID 20620946.Interleukin 4 and STAT6 gene polymorphisms are associated with systemic lupus erythematosus in Chinese patients. Yu HH, et al. Lupus, 2010 Sep. PMID 20530519.Interleukin-9 polymorphism in infants with respiratory syncytial virus infection: an opposite effect in boys and girls. Schuurhof A, et al. Pediatr Pulmonol, 2010 Jun. PMID 20503287.





Immunoperoxidase of monoclonal antibody to STAT6 on formalin-fixed paraffin-embedded human colon. [antibody concentration 3 ug/ml]





Immunofluorescence of monoclonal antibody to STAT6 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged STAT6 is approximately 0.1ng/ml as a capture antibody.

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