

# Immunotag™ Stat4 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITM3456
Product Description	Immunotag™ Stat4 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	STAT4
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunoprecipitation: 2-5 ug/mg lysate. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	Synthesized peptide derived from human Stat4 around the non-phosphorylation site of Y693.
Specificity	The antibody detects endogenous Stat4 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50% Glycerol.
Gene Name	STAT4
Accession No.	Q14765 P42228
Alternate Names	STAT4; Signal transducer and activator of transcription 4

## Antibody Specification

Description	signal transducer and activator of transcription 4(STAT4) Homo sapiens 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 is essential for mediating responses to IL12 in lymphocytes, and regulating the differentiation of T helper cells. Mutations in this gene may be associated with systemic lupus erythematosus and rheumatoid arthritis. Alternate splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, Aug 2011],
Cell Pathway/ Category	Jak_STAT,
Protein Expression	Brain,Kidney,Pancreas,Spleen,Testis,Uterus,
Subcellular Localization	nucleus,nucleoplasm,cytoplasm,
Protein Function	disease:Genetic variations in STAT4 are associated with susceptibility to rheumatoid arthritis (RA) [MIM:180300]. Rheumatoid arthritis is a complex, multifactorial disorder. It is one of the most common autoimmune diseases and it is characterized by inflammation of synovial tissue and joint destruction.,disease:Genetic variations in STAT4 are associated with susceptibility to systemic lupus erythematosus type 11 (SLEB11) [MIM:612253]. Systemic lupus erythematosus (SLE) is a chronic autoimmune disease with a complex genetic basis. SLE is an inflammatory, and often febrile multisystemic disorder of connective tissue characterized principally by involvement of the skin, joints, kidneys, and serosal membranes. It is thought to represent a failure of the regulatory mechanisms of the autoimmune system.,function:Carries out a dual function: signal transduction and activation of transcription. Involved in IL12 signaling.,PTM:Tyrosine phosphorylated. Serine phosphorylation is also required for maximal transcriptional activity.,similarity:Belongs to the transcription factor STAT family.,similarity:Contains 1 SH2 domain.,subcellular location:Translocated into the nucleus in response to phosphorylation.,subunit:Forms a homodimer or a heterodimer with a related family member (By similarity). The SH2 domain interacts, in vitro, with IL12RB2 via a short cytoplasmic domain.,
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