

# Immunotag™ Phospho-STAT3 (Tyr705) Antibody

Antibody Specification	
Catalog No.	ITA1062
Product Description	Immunotag™ Phospho-STAT3 (Tyr705) Antibody
Size	100 µg, 200 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	Phospho-STAT3 (Tyr705)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC,IF/ICC,IP,ELISA
Recommended Dilution	WB 1:500-1:2000 IHC 1:50-1:200 IP, IF/ICC 1:100-1:500
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human STAT3 around the phosphorylation site of Tyrosine 705
Specificity	Phospho-STAT3 (Tyr705) Antibody detects endogenous levels of STAT3 only when phosphorylated at Tyrosine 705
Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	STAT3
Accession No.	P40763

## Antibody Specification

Alternate Names	1110034C02Rik; Acute Phase Response Factor; Acute-phase response factor; ADMIO; APRF; AW109958; DNA binding protein APRF; FLJ20882; HIES; MGC16063; Signal transducer and activator of transcription 3 (acute phase response factor); Signal transducer and activator of transcription 3; STAT 3; Stat3; STAT3_HUMAN;
Description	Signal transducer and transcription activator that mediates cellular responses to interleukins, KITLG/SCF, LEP and other growth factors (PubMed:10688651, PubMed:12359225, PubMed:12873986, PubMed:15194700, PubMed:17344214, PubMed:18242580, PubMed:23084476). Once activated, recruits coactivators, such as NCOA1 or MED1, to the promoter region of the target gene (PubMed:17344214). May mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4 (PubMed:12873986). Binds to the interleukin-6 (IL-6)-responsive elements identified in the promoters of various acute-phase protein genes (PubMed:12359225). Activated by IL31 through IL31RA (PubMed:15194700). Acts as a regulator of inflammatory response by regulating differentiation of naive CD4+ T-cells into T-helper Th17 or regulatory T-cells (Treg): deacetylation and oxidation of lysine residues by LOXL3, leads to disrupt STAT3 dimerization and inhibit its transcription activity (PubMed:28065600). Involved in cell cycle regulation by inducing the expression of key genes for the progression from G1 to S phase, such as CCND1 (PubMed:17344214). Mediates the effects of LEP on melanocortin production, body energy homeostasis and lactation (By similarity). May play an apoptotic role by transactivating BIRC5 expression under LEP activation (PubMed:18242580). Cytoplasmic STAT3 represses macroautophagy by inhibiting EIF2AK2/PKR activity (PubMed:23084476). Plays a crucial role in basal beta cell functions, such as regulation of insulin secretion (By similarity).
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	86kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.