

Product datasheet for **TA385338S**

STAT3 Rabbit Monoclonal Antibody [Clone ID: R05-7B2]

Product data:

| | |
|-------------------------|---|
| Product Type: | Primary Antibodies |
| Clone Name: | R05-7B2 |
| Applications: | IF, WB |
| Recommended Dilution: | WB: 1/1000 ICC/IF: 1/20 |
| Reactivity: | Human, Rat |
| Host: | Rabbit |
| Isotype: | IgG |
| Clonality: | Monoclonal |
| Immunogen: | A synthetic phosphopeptide corresponding to residues surrounding Ser727 of human STAT3 (Phosphorylated) |
| Formulation: | 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA |
| Concentration: | lot specific |
| Purification: | Affinity Purified |
| Conjugation: | Unconjugated |
| Storage: | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |
| Stability: | 1 year |
| Predicted Protein Size: | Calculated MW: 88 kDa; Observed MW: 88 kDa |
| Gene Name: | signal transducer and activator of transcription 3 |
| Database Link: | Entrez Gene 6774 Human P40763 |



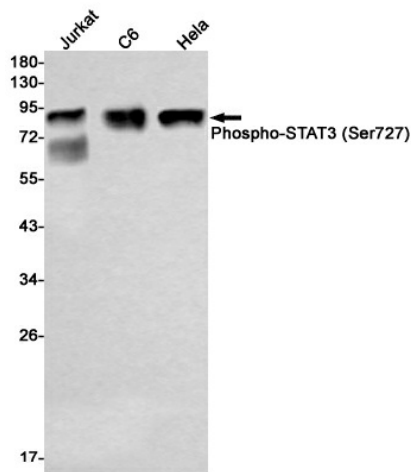
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Background:

Swiss-Prot Acc.P40763. 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. 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.

Synonyms:

APRF; FLJ20882; HIES; MGC16063

Product images:

Western blot analysis of Phospho-STAT3 (Ser727) in Jurkat, C6, HeLa lysates using Phospho-STAT3 (Ser727) antibody.