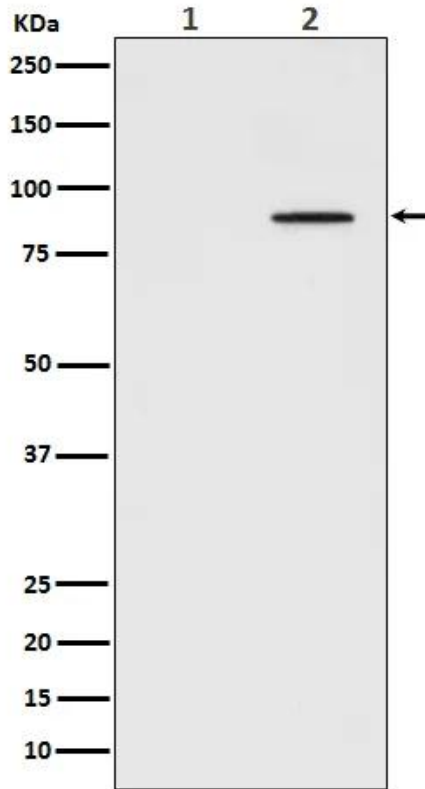


|                          |  |
|--------------------------|--|
| <b>Product name:</b>     | Phospho-STAT3 (Y705) (13H8) Rabbit Monoclonal Antibody   |
| <b>Cat number:</b>       | MABN06021  |
| <b>Conjugate:</b>        | Unconjugated   |
| <b>Size:</b>             | 200µL  |
| <b>Clone:</b>            | Y705   |
| <b>Concentration:</b>    | 1mg/ml   |
| <b>Host:</b>             | Rabbit   |
| <b>Isotype:</b>          | IgG  |
| <b>Reactivity:</b>       | Human,Mouse,Rat  |
| <b>Applications:</b>     | WB 1:1000-1:10000,IHC 1:50-1:100,ICC/IF 1:200-1:500,FC 1:200-1:500,IP 1:20-1:50  |
| <b>Molecular Weight:</b> | 88kDa  |
| <b>Purification:</b>     | Affinity purification  |
| <b>Form:</b>             | liquid   |
| <b>Buffer:</b>           | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |
| <b>Storage:</b>          | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.   |

**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. 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). Upon activation of IL6ST/gp130 signaling by interleukin-6 (IL6), binds to the IL6-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).



Western blot analysis of Phospho-STAT3 (Tyr705) expression in (1) HeLa cell lysate; (2) HeLa cell lysate treated with IFN-a.