



## Stat3 (phospho Tyr705) rabbit pAb

Cat#: orb764281 (Manual)

For research use only. Not intended for diagnostic use.

Product Name Stat3 (phospho Tyr705) rabbit pAb

Host species Rabbit

Applications IF;WB;IHC;IP;ELISA

Species Cross-Reactivity Human; Mouse; Rat; Pig(Test by out customer)

**Recommended dilutions** IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 -

1/300. Immunoprecipitation: 2-5 ug/mg lysate. ELISA: 1/20000. Not yet

tested in other applications.

Immunogen The antiserum was produced against synthesized peptide derived from

human STAT3 around the phosphorylation site of Tyr705. AA range:672-

721

Specificity Phospho-Stat3 (Y705) Polyclonal Antibody detects endogenous levels of

Stat3 protein only when phosphorylated at Y705.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium

azide..

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name Signal transducer and activator of transcription 3

Gene Name STAT3

Cellular localization Cytoplasm . Nucleus . Shuttles between the nucleus and the cytoplasm.

Translocated into the nucleus upon tyrosine phosphorylation and

dimerization, in response to signaling by activated FGFR1, FGFR2, FGFR3 or FGFR4. Constitutive nuclear presence is independent of tyrosine phosphorylation. Predominantly present in the cytoplasm without stimuli. Upon leukemia inhibitory factor (LIF) stimulation, accumulates in the nucleus. The complex composed of BART and ARL2 plays an important role in the nuclear translocation and retention of STAT3. Identified in a

complex with LYN and PAG1.



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Purification The antibody was affinity-purified from rabbit antiserum by affinity-

epitope-specific immunogen. chromatography using

Polyclonal **Clonality** 

Concentration 1 mg/ml

**Observed band** 88kD

**Human Gene ID** 6774

**Human Swiss-Prot Number** P40763

STAT3; APRF; Signal transducer and activator of transcription 3; Acute-**Alternative Names** 

phase response factor

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 **Background** 

phosphorylated by the receptor associated kinases, and then form homo- or

heterodimers that translocate to the cell nucleus where they act as

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. This protein mediates the expression of a variety of genes in response to cell stimuli, and thus plays a key role in many cellular processes such as cell growth and apoptosis. The small GTPase Rac1 has been shown to bind and regulate the activity of this protein. PIAS3 protein is a specific inhibitor of this protein. Mutations in this gene are associated with infantile-onset multisystem autoimmune disease and hyper