**bsm-52211R** **[ Primary Antibody ]**

# phospho-STAT3 (Tyr705) Recombinant Rabbit mAb

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## DATASHEET

**Host:** Rabbit
**Isotype:** IgG
**Clonality:** Recombinant
**CloneNo.:** 4C2
**GeneID:** 6774
**SWISS:** P40763
**Target:** STAT3 (Tyr705)

**Immunogen:** A synthesized peptide derived from human STAT3 around the phosphorylation site of Y705: AP-pY-LK.

**Purification:** affinity purified by Protein A

**Concentration:** 1mg/ml

**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated 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. 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-immunoglobulin E syndrome. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Sep 2015]

**Applications:** **WB** (1:500-2000)
**IHC-P** (1:50-200)
**IHC-F** (1:50-200)
**IF** (1:50-200)
**ICC/IF** (1:50-200)

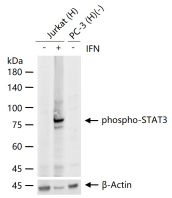
**Reactivity:** Human, Mouse, Rat

**Predicted MW.:** 85 kDa

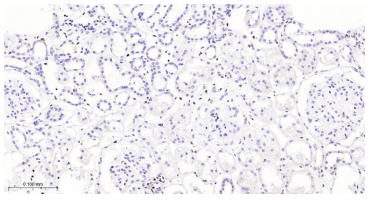
**Observed MW.:** 77 kDa

**Subcellular Location:** Cytoplasm ,Nucleus

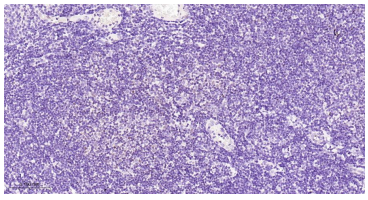
## VALIDATION IMAGES




Jurkat (H) cells were treated with or without IFN (50 ng/ml) for 30 min, 25 µg total protein per lane of cell lysates (see on figure) probed with phospho-STAT3 monoclonal antibody, unconjugated (bsm-52211R) at 1:3000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded Human Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with phospho-STAT3 (Tyr705) Monoclonal Antibody, Unconjugated(bsm-52211R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Tonsil; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with phospho-STAT3 (Tyr705) Monoclonal Antibody, Unconjugated(bsm-52211R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.

## SELECTED CITATIONS


- **[IF=17.4]** Hui Yan. et al. Elaboration a ROS-responsive darutigenol prodrug nanoassemblies for inflammatory arthritis treatment. NANO TODAY. 2024 Apr;55:102220 WB ;Mouse. 10.1016/j.nantod.2024.102220
- **[IF=7.7]** Yangyang Pan. et al. RTA activates the activity of the miR-155 promoter region and promotes the growth and

invasion of endothelial cells through the regulatory network of miR-155/GATA3/STAT3. INT J BIOL MACROMOL. 2025 May;310:143536 WB ;Human. 40288717