



COSMO BIO CO., LTD.  
Inspiration for Life Science

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## Catalog No. CBX00237

Mouse monoclonal antibody

# Anti-Human STAT3

### ■ Formulation

Mouse monoclonal anti-human **STAT3** antibody in PBS (3.0 mM KCl, 1.5 mM  $\text{KH}_2\text{PO}_4$ , 140 mM NaCl, 8.0 mM  $\text{Na}_2\text{HPO}_4$  (pH 7.4)) containing 1% bovine serum albumin (BSA) and 0.05% sodium azide ( $\text{NaN}_3$ ).

### ■ Antibody concentration

100  $\mu\text{g}/\text{ml}$  (1.0 ml)

### ■ Storage

Store at 2-8°C for up to one year.  
We recommend storing at -20°C for long-term storage.  
Avoid repeat freezing and thawing cycles.

### ■ Preparation

This antibody was purified using protein G column chromatography from culture supernatant of hybridoma cultured in a medium containing bovine IgG-depleted (approximately 95%) fetal bovine serum.

### ■ Sterility

Filtered through a 0.22  $\mu\text{m}$  membrane.

### ■ Applications

WB, IP, IC, ELISA, FC

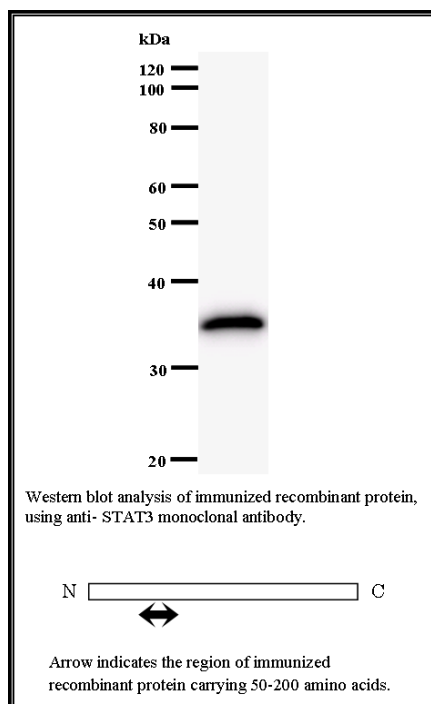
### ■ Disposal

This antibody solution contains sodium azide ( $\text{NaN}_3$ ) as a preservative. There is a potential hazard that  $\text{NaN}_3$  reacts with copper or lead to produce an explosive compound. For safe disposal, the vial has to be washed thoroughly with water.

### ■ Safety warnings and precautions

Caution must be taken to avoid contact with skin or eyes. In such a case, rinse thoroughly at once with water. Do not ingest, inhale, or swallow. Seek medical attention immediately.  
Wear appropriate protective clothing such as laboratory overalls, safety glasses and gloves.  
It is strongly advised that this product should be handled by people who have been well trained in laboratory techniques and that it is handled with care pursuant to the principles of good laboratory practice. All chemicals are deemed potentially harmful.  
The vial is prone to fall over. Use caution, especially when the lid is off.

Lot No. **STAAD22A-2**  
Clone No. **STAAD22A**  
Antibody class : **IgG1**  
Immunogen : **Recombinant**



FOR RESEARCH USE ONLY, NOT FOR USE IN DIAGNOSTIC PROCEDURES.

manufactured by BMR



Catalog No. **CBX00237**

Mouse monoclonal antibody

**Anti-Human STAT3**

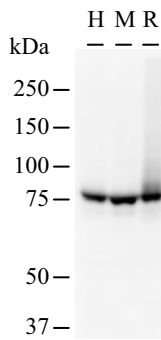
### Background

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. Three alternatively spliced transcript variants encoding distinct isoforms have been described. [NCBI Entrez Gene Summary]

### Recommended condition

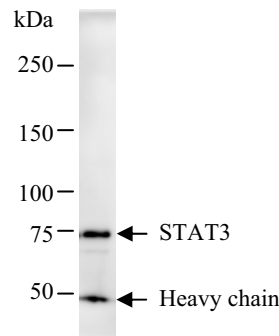
WB: 0.2-2 µg/ml IP: 100-500 µg/sample FC: 0.5-2 µg/sample IC: 2-100 µg/ml

### Application

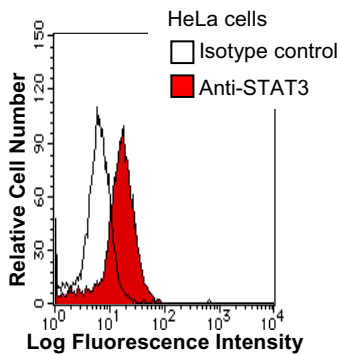


Detection of STAT3 by Western blot.  
Samples: Whole cell lysate from human HeLa (H, 25 µg), mouse NIH3T3 (M, 50 µg) and rat F2408 (R, 50 µg) cells. [Lot No. STAAD22A-2]

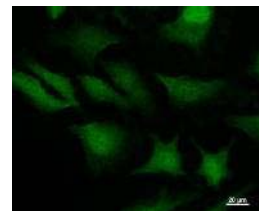
Predicted molecular weight: 87 kDa



Immunoprecipitation: RIPA lysate of HeLa cells was incubated with anti-STAT3 mAb. [Lot No. STAAD22A-2]



HeLa cells were fixed in 2% paraformaldehyde/PBS and then permeabilized in 90% methanol. Cells were stained with anti-STAT3 mAb (shaded) or isotype control (unshaded) followed by Alexa Fluor(R) 488-conjugated goat anti-mouse IgG. [Lot No. STAAD22A-2]



Immunostaining analysis in HeLa cells. HeLa cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100 in PBS. The cells were immunostained with anti-STAT3 mAb. [Lot No. STAAD22A-1]