

## Monoclonal Antibody to

**STAT3 (phospho-Tyr 705)****clone 9E12**

Order No.: **0036-100/STAT3-9E12** Last Modified 10.02.2005

Size (µg) 100

Lot No.: 0036S

Host: Mouse

Isotype: IgG1 kappa

Immunogen: Phosphopeptide conjugated to KLH

Epitope: . . . A P pY<sub>705</sub> L K . . .

<u>Species Reactivity</u>	Human	Mouse	Rat	Dog
	yes	yes	no	yes

**Background & Specificity:**

The STAT proteins serve as both cytoplasmic signal transducers and nuclear activators of transcription. STAT3 is activated by tyrosine phosphorylation at residue Y705 in cells treated with Interleukin 6 or EGF. Activated STAT3 can bind to DNA either as homodimer or as heterodimer with STAT1.

**Mab STAT3-9E12** specifically recognizes activated **STAT3 phosphorylated at tyrosine 705**. The antibody does not crossreact with the non-phosphorylated form of STAT3 nor with unrelated tyrosine-phosphorylated proteins. Mab STAT3-9E12 is particularly suited for Western Blot and ELISA applications.

**Related products:**

Mab STAT3-23G5, directed against STAT3 phosphorylated at Serine 727 (0145-100/STAT3-23G5).  
 Mab STAT5-5G4, directed against STAT5 A/B phosphorylated at Tyrosines 695/699 (#0121-100/STAT5-5G4).  
 Mab STAT6-16E12, directed against STAT6 phosphorylated at Tyrosine 641 (#0079-100/STAT6-16E12).  
 Mab STAT6-8C12, directed against generic STAT6 (0063-100/STAT6-8C12).

**Purification:** The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.

**Formulation:** lyophilized from 1 ml 2 x PBS / 0.1 % Na-azide / PEG and Sucrose.

**Reconstitution:** Reconstitute with 1 ml H<sub>2</sub>O (15 min, RT).

**Stability:** Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted antibody can be stored frozen at -80°C up to 1 year. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months.

**Avoid repeated freeze / thaw cycles**

**Positive Control:** Cell lysate from vanadate-treated A431 cells (#0832).

**Immunoblotting:** 0.1 µg/ml for HRPO/ECL detection  
**Recommended blocking buffer CPPT:** 0.5% (w/v) casein, 1% (w/v) PEG 4000, 1% (w/v) Polyvinylpyrrolidone (PVP), 0.1% (v/v) Tween 20, 10 mM Tris/HCl, pH 7.4, 150 mM NaCl

**Immunoprecipitation** use at 1 - 10 µg per 10<sup>6</sup> vanadate treated A431 cells

**Immunocytochemistry** ND

**ELISA:** use at 0.05 µg/ml

**All products are supplied for research and investigational use only. Not for use in humans.**