

## Mouse Monoclonal Antibody to

# STAT6 (phospho-Tyr 641)

## clone 16E12

**Order No.:** 0079-100/STAT6-16E12  
**Size (µg)** 100  
**Lot No.:** 0079S

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03/080507F

Isotype	Species	Reactivity	Applications	Mol. Weight	Ref. Cell Line	Epitope	Immunogen
IgG1	human		WB, IHC	ELISA, 100 kDa	HepG2	phosphotyrosine 641 ... G R G pY V P A ...	phosphopeptide conjugated to KLH

### Background and Specificity:

The STAT proteins serve as both cytoplasmic signal transducers and nuclear activators of transcription. STATs are mediators involved in cytokine signalling. In response to a specific cytokine signal, STAT proteins are phosphorylated on conserved tyrosine residues. Phosphorylated STAT proteins dimerize via their SH2 domains and move to the nucleus. The STAT dimers bind to specific DNA elements resulting in transcriptional regulation of downstream target genes.

STAT6 is activated primarily by IL-4 and IL-13. Upon activation, STAT6 is phosphorylated at tyrosine 641 by Janus Kinase (JAK). Phosphorylated STAT6 forms head-to-tail heterodimers and translocates to the nucleus where it participates in transcriptional control.

**Mab STAT6-16E12** specifically recognizes activated STAT6 phosphorylated at Tyr 641 at 100 kDa. The antibody does not crossreact with non-phosphorylated form of STAT6 nor with unrelated phosphorylation sites.

### Related Products

**mab to STAT1 (phospho-Ser 727)**

#0176-100/STAT1-12C5

**mab to STAT3 (phospho-Tyr 705)**

#0036-100/STAT3-9E12

**mab to STAT3 (phospho-Ser 727)**

#0145-100/STAT3-23G5

**mab to STAT5 A/B (phospho-Tyr 695/699)**

#0121-100/STAT5-5G4

**mab to STAT6 (aa 630-650)**

#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 / 0.09 % Na-azide / PEG and Sucrose.

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

**Stability:** For long-term storage, freeze lyophilizate upon arrival (-20°C). 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.**

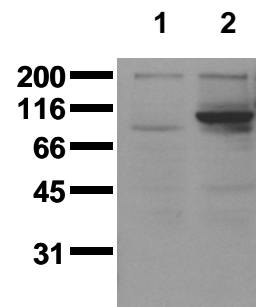
**Positive Control:** #0815: Cell lysate from IL-4-treated HepG2 cells

**Immunoblotting:** 1 µg/ml for HRPO/ECL detection  
**Recommended blocking buffer:** Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product #3031-500/CPPT or #3031-3000/CPPT.

**Immunoprecipitation:** ND

**Immunocytochemistry:** ND

**ELISA:** use at 0.05 µg/ml



**Phosphospecificity**

Whole cell lysates of untreated (lane 1) and IL4-treated (lane 2) HepG2 cells were applied to SDS-PAGE and transferred to a PVDF membrane. The immunoblot was probed with mab STAT6-16E12 at 1µg/ml for 1h at 15-22°C and developed by ECL (exposure time: 3min).

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