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#56554**Phospho-Stat6 (Tyr641) (D8S9Y) Rabbit mAb**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IP, IF-IC, FC-FP, ChIP	<b>Reactivity:</b> H M	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 110	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P42226	<b>Entrez-Gene Id:</b> 6778
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**Product Usage Information**

For optimal ChIP results, use 5 µl of antibody and 10 µg of chromatin (approximately 4 x 10<sup>6</sup> cells) per IP. This antibody has been validated using SimpleChIP<sup>®</sup> Enzymatic Chromatin IP Kits.

**Application**

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (Immunocytochemistry)	1:200 - 1:800
Flow Cytometry (Fixed/Permeabilized)	1:50 - 1:200
Chromatin IP	1:100

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #46186.

**Specificity/Sensitivity**

Phospho-Stat6 (Tyr641) (D8S9Y) Rabbit mAb recognizes endogenous levels of Stat6 protein only when phosphorylated at Tyr641. Weak cross-reactivity with other tyrosine-phosphorylated proteins has been observed in some cell lines.

**Species predicted to react based on 100% sequence homology**

Rat

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic phospho-peptide corresponding to residues surrounding Tyr641 of human Stat6 protein.

**Background**

Upon activation by Janus kinases, Stat6 translocates to the nucleus where it regulates cytokine-induced gene expression. Stat6 is activated via phosphorylation at Tyr641 and is required for responsiveness to IL-4 and IL-13 (1-4). In addition, Stat6 is activated by IFN-α in B cells, where it forms transcriptionally active complexes with Stat2 and p48 (5,6). Protein phosphatase 2A is also involved in regulation of IL-4-mediated Stat6 signaling (7).

**Background References**

- Nelms, K. et al. (1999) *Ann. Rev. Immunol.* 17, 701-738.
- Malabarba, M.G. et al. (1996) *Biochem. J.* 319, 865-872.
- Hou, J. et al. (1994) *Science* 265, 1701-1706.
- Quelle, F.W. et al. (1995) *Mol. Cell. Biol.* 15, 3336-3343.
- Takeda, K. et al. (1996) *Nature* 380, 627-630.
- Gupta, S. et al. (1999) *J. Immunol.* 163, 3834-3841.
- Woetmann, A. et al. (2003) *J. Biol. Chem.* 278, 2787-2791.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized) **ChIP:** Chromatin IP

**Cross-Reactivity Key**

**H:** Human **M:** Mouse

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