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## Product Information

### Anti-phospho-STAT6 (phosphotyrosine 641)

Developed in Rabbit,  
Affinity Isolated Antibody

Product Number **S 5061**

#### Product Description

Anti-phospho-STAT6 (phosphotyrosine 641) is developed in rabbit using a synthetic phospho-Tyr641 peptide corresponding to residues around Tyr641 of human Stat6 conjugated to KLH as immunogen. This antibody is affinity-purified using the protein A and peptide affinity chromatography.

Anti-phospho-STAT6 (phosphotyrosine 641) detects Stat6 only when phosphorylated at phosphotyrosine 641. This antibody reacts with human and mouse phosphorylated Stat6 and may be used for immunoblotting.

A wide variety of extracellular signals activate the Stat (signal transducers and activators of transcription) class of transcription factors. Stat factors are central components of signaling cascades triggered by cytokine receptors. They are phosphorylated in response to ligand stimulation through receptor-associated Janus Kinases (JAKs). Stat6 is activated in response to interleukin (IL)-4. Phosphorylation on residue tyrosine 641 is obligatory for Stat6 activation.<sup>1,2</sup> Stat6 plays a central role in exerting IL-4 mediated biological responses.<sup>3</sup>

#### Reagents

Anti-phospho-STAT6 (phosphotyrosine 641) is supplied as an affinity-isolated antibody in 10 mM sodium HEPES, pH 7.5, containing 150 mM sodium chloride, 100 µg/ml bovine serum albumin and 50% glycerol.

#### Storage/Stability

Store at 0° to -20°C. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

#### Product Profile

Recommended working dilution is 1:1,000 for immunoblotting (chemiluminescent) using an extract from interleukin-4-treated Daudi cells.

For immunoblotting, incubate membrane with diluted antibody in 5% bovine serum albumin (BSA), 1X Tris buffered saline and 0.1% Tween-20 at 2-8°C with gentle shaking, overnight.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working dilution by titration test.

#### References

1. Hou, J., et al., *Science*, **265**, 1701-1706 (1994).
2. Quelle, F.W., et al, *Mol. Cell Biol.*, **15**, 3336-3343 (1995).
3. Takeda, K., et al., *Nature*, **380**, 627-630 (1996).

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