

#56554 Store at -20C

Phospho-Stat6 (Tyr641) (D8S9Y) Rabbit mAb



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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IF-IC, FC-FP, ChIP	H M	Endogenous	110	Rabbit IgG	#P42226	6778

Product Usage Information

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

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.

Specificity / Sensitivity

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

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

1. Nelms, K. et al. (1999) *Ann. Rev. Immunol.* 17, 701-738.
2. Malabarba, M.G. et al. (1996) *Biochem. J.* 319, 865-872.
3. Hou, J. et al. (1994) *Science* 265, 1701-1706.
4. Quelle, F.W. et al. (1995) *Mol. Cell. Biol.* 15, 3336-3343.
5. Takeda, K. et al. (1996) *Nature* 380, 627-630.
6. Gupta, S. et al. (1999) *J. Immunol.* 163, 3834-3841.
7. 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

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

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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