

Product Datasheet

Phospho-Stat1 (Tyr701) rabbit mAb Antibody (orb1946188)

Catalog Number	orb1946188
Category	Antibodies
Description	<p>Stat1 mediates the cellular response to IFNα, IFNβ, and IFNγ for the regulation of cell growth and the defense against viral and immune challenges. The Jak-Stat pathway plays a central role in the IFNγ response, where Stat1 phosphorylation on Tyr701 causes homodimerization through its SH2 domain, translocation to the nucleus, and binding to gamma-activated sequence (GAS) elements. Early in the activation sequence, Stat1 is also phosphorylated at Ser727 through a mechanism involving PI3 kinase and Akt. Stat1 has been found to correlate with increased resistance to chemotherapeutic drugs. However, Stat1 activation of the immune system helps suppress tumor growth, and multiple melanomas and squamous-cell carcinomas have been known to downregulate Stat1 expression to evade immune surveillance.</p>
Clonality	Monoclonal
Species/Host	Rabbit
Isotype	Rabbit IgG1k
Conjugation	Unconjugated
Reactivity	Human, Mouse
Form/Appearance	Liquid
Concentration	0.5 mg/mL
Buffer/Preservatives	1X PBS, 0.02% NaN ₃ , 50% Glycerol, 0.1% rAlbumin
Purification	Protein A+G

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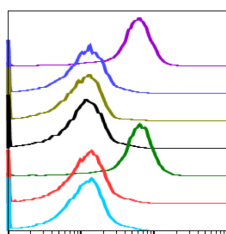
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Immunogen	A synthetic phospho-peptide corresponding to residues surrounding Tyr701 of human phospho Stat1
UniProt ID	P42224
Tested applications	FC
Dilution range	1µg/mL - 0.001µg/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.
Cross Reactivity	Predicted to work with mouse, rat, and other homologues.
Clone Number	B5G8
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Note	For research use only
Expiration Date	12 months from date of receipt.



SampleID	Count	Median: BL1-A
IFN 3E6 N	9771	5586
Ctrl 3E6 N	19790	1089
IFN 3E6 P	7520	971
Ctrl 3E6 P	16840	1051
IFN 3E6	10436	5909
Ctrl 3E6	19084	1119
Ctrl 2° only	21520	1053

Peptide blocking flow cytometric analysis of U937 cells secondary antibody only negative control (light blue) or untreated (red) or treated with IFN α IL-4 and pervanadate (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or treated and blocked with non-phospho peptide (purple) using Phospho-Stat1 (Tyr701) antibody Stat1Y701-3E6 at 0.1µg/mL. Cat. #orb1946188.

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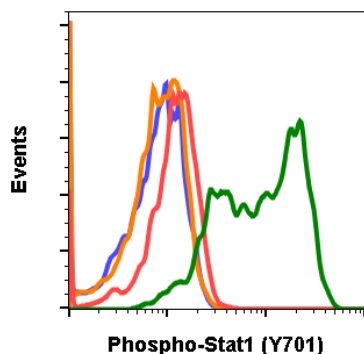
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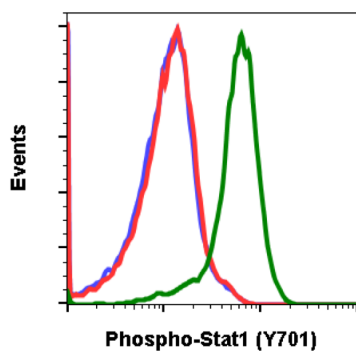
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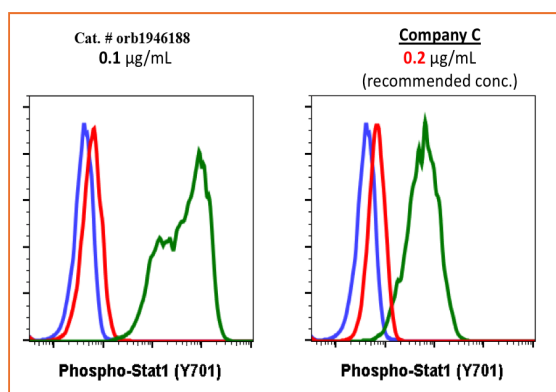
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Flow cytometric analysis of NIH3T3 cells secondary antibody only negative control (blue) or 0.1 $\mu\text{g}/\text{mL}$ of isotype control Cat. #orb1946241 (orange) or treated with imatinib (red) or with pervanadate (green) using Phospho-Stat1 (Tyr701) antibody Stat1Y701-3E6 at 0.1 $\mu\text{g}/\text{mL}$. Cat #orb1946188.



Flow cytometric analysis of U937 cells secondary antibody only negative control (blue) or untreated (red) or treated with IFN α + IL-4 and pervanadate (green) using Phospho-Stat1 (Tyr701) antibody Stat1Y701-3E6 at 0.005 $\mu\text{g}/\text{mL}$ Cat. #orb1946188.



Flow cytometric analysis of U937 cells secondary antibody only negative control (blue) or untreated (red) or treated with IFN α + IL-4 + pervanadate (green) using 0.1 $\mu\text{g}/\text{mL}$ of Phospho-Stat1 (Tyr701) antibody Stat1Y701-3E6 Cat. #orb1946188 or Company C antibody at 0.2 $\mu\text{g}/\text{mL}$ (manufacturer's recommended concentration).

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