

Product Datasheet

Phospho-Stat3 (Tyr705) (B12) rabbit mAb SureLight488 conjugate Antibody (orb1946361)

Catalog Number	orb1946361
Category	Antibodies
Description	<p>Considered an oncogene, Stat3 is constitutively active in 70% of solid and hematological tumors, including leukemia, lymphoma, and multiple myeloma. The IL-6-Jak-Stat3 pathway can mediate cancer inflammation through both mutation of key regulatory genes and environmental stressors. Attempts at directly targeting Stat3 in cancer therapy have focused on the development of phosphopeptides and mimics that interact with the phospho-tyrosine-SH2 domain of Stat3 in an effort to destabilize active dimers and prevent DNA binding. Stat3 is primarily phosphorylated at Tyr705 upon activation of the Jak-Stat3 pathway. Secondary phosphorylation at Tyr727 at the C-terminus is thought to occur after Tyr705 phosphorylation. However, studies in melanoma have shown constitutive phosphorylation at Tyr727 that promotes survival of these cancerous cells.</p>
Clonality	Monoclonal
Species/Host	Rabbit
Isotype	Rabbit IgG1k
Conjugation	SureLight 488
Reactivity	Human, Mouse
Form/Appearance	Liquid
Buffer/Preservatives	1X PBS, 0.09% NaN ₃ , 0.2% rAlbumin
Purification	Protein A+G

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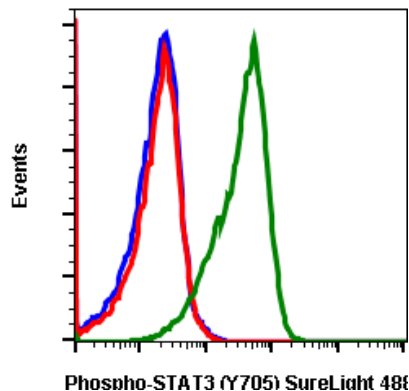
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Immunogen	A synthetic phospho-peptide corresponding to residues surrounding Tyr705 of human phospho Stat3
UniProt ID	P40763
Tested applications	FC
Dilution range	For flow cytometric staining, the suggested use of this reagent is 5 μ L per million cells or 5 μ L per 100 μ L of staining volume. It is recommended that the reagent be titrated for optimal performance for each application.
Cross Reactivity	Predicted to work with mouse, rat and other homologues.
Clone Number	Stat3Y705-B12
Storage	2-8°C
Note	For research use only
Expiration Date	12 months from date of receipt.



Flow cytometric analysis of Jurkat cells secondary antibody only negative control (blue) or untreated (red) or treated with IFN α IL4 and pervanadate (green) using Phospho-Stat3 (Tyr705) antibody Stat3Y705 B12-SureLight[®] 488 Cat. #orb1946361.

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