

PE anti-STAT1 Phospho (Ser727) Antibody

Catalog# / Size	686403 / 25 tests 686404 / 100 tests
Clone	A15158B
Regulatory Status	RUO
Other Names	Signal transducer and activator of transcription 1 (STAT1), Transcription factor ISGF-3 components p91/p84
Isotype	Mouse IgG1, κ
Description	STAT1, also known as signal transduction and activator of transcription 1, is a ubiquitously expressed cytoplasmic protein and is activated in response to cytokine signaling, including IFN- α , IFN- γ , EGF, PDGF, and IL-6. Upon activation, STAT1 is phosphorylated by receptor-associated kinases, translocates to the nucleus, and functions as a transcription factor. Two isoforms of STAT1, with apparent molecular weights of 88 and 91 kD, exist as a result of alternative RNA processing. STAT1 is involved in IFN-mediated immune responses, and STAT1-deficient mice are highly sensitive to bacterial and viral infections.

Product Details

Verified Reactivity	Human, Mouse
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human STAT1 peptide phosphorylated at Ser 727.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Phos™ Perm Buffer in Cell Suspensions Protocol. For flow cytometric staining, the suggested use of this reagent is 5 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood. For staining mouse cells a higher volume than 5 μ l may be required.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Product Citations	<ol style="list-style-type: none">1. Lin JR <i>et al.</i> 2018. eLife. 7 pii: e31657. PubMed2. Sanmarco LM, <i>et al.</i> 2021. Nature. 590:473. PubMed3. Vogel A, <i>et al.</i> 2022. Cell Rep. 38:110420. PubMed4. Hering L, <i>et al.</i> 2020. Front Immunol. 1.747222222. PubMed
RRID	AB_2616938 (BioLegend Cat. No. 686403) AB_2616939 (BioLegend Cat. No. 686404)

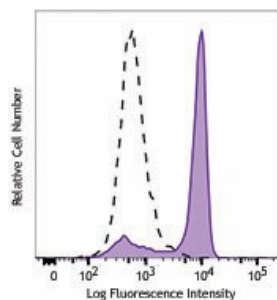
Antigen Details

Structure	750 amino acids, predicted molecular weight of 87 kD; contains a SH2 domain responsible for homodimerization or heterodimerization.
Distribution	Translocates to the nucleus when phosphorylated.
Function	Phosphorylated in response to cytokine signaling by receptor-associated kinases; translocates to the nucleus to act as a transcription factor. Mediates responses to type I (IFN- α/β) and II interferon (IFN- γ), EGF, PDGF, and IL-6.
Interaction	Forms a homodimer or heterodimers with other family members. Interacts with FAK, MCM3, MCM5, TRADD, BRCA1, KIT, IL-27R, IL-2R β , IL-2R γ , IFN $\alpha\beta$ R, and c-Src.
Biology Area	Cell Biology, Signal Transduction
Molecular Family	Nuclear Markers, Phospho-Proteins
Antigen References	<ol style="list-style-type: none"> 1. Durbin JE, <i>et al.</i> 1996. <i>Cell</i>. 84:443. 2. Darnell JE Jr, <i>et al.</i> 1994. <i>Science</i> 264:1415. 3. Chen X, <i>et al.</i> 1998. <i>Cell</i>. 93:827. 4. Ramana CV, <i>et al.</i> 2000. <i>Oncogene</i>. 19:2619.
Gene ID	6772

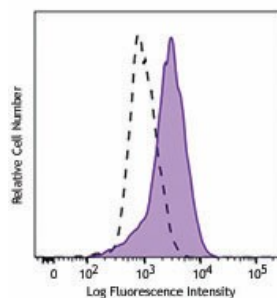
Other Formats

Purified anti-STAT1 Phospho (Ser727), PE anti-STAT1 Phospho (Ser727), Alexa Fluor® 594 anti-STAT1 Phospho (Ser727), Alexa Fluor® 647 anti-STAT1 Phospho (Ser727), Alexa Fluor® 488 anti-STAT1 Phospho (Ser727), PE/Cyanine7 anti-STAT1 Phospho (Ser727), Go-ChIP-Grade™ Purified anti-STAT1 Phospho (Ser727), PerCP/Cyanine5.5 anti-STAT1 Phospho (Ser727)

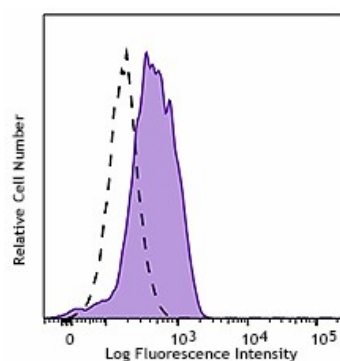
Product Data



HeLa cells were stimulated with (filled histogram) or without (open histogram) nocodazole for 24 hours, fixed with Fixation Buffer, permeabilized with True-Phos™ Perm Buffer, then intracellularly stained with anti-STAT1 Phospho (Ser727) antibody (clone A15158B) PE.



Human peripheral blood lymphocytes were stimulated with (filled histogram) or without (open histogram) Cell Activation Cocktail (without Brefeldin A) for 15 minutes, fixed with Fixation Buffer, permeabilized with True-Phos™ Perm Buffer, then intracellularly stained with anti-STAT1 Phospho (Ser727) antibody (clone A15158B) PE.



NIH/3T3 cells were treated with (filled histogram) or without (open histogram) nocodazole for 24 hours, fixed with Fixation Buffer (Cat No. 420801), permeabilized with True-Phos™ Perm Buffer (Cat No. 425401), then intracellularly stained with anti-STAT1 Phospho (Ser727) antibody (clone A15158B) PE.

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