SONY

Product Data Sheet

Alexa Fluor® 488 anti-STAT3 Phospho (Ser727)

Catalog # / Size: 4094555 / 25 tests
4094560 / 100 tests

Clone: A16089B

Isotype: Mouse IgG1, κ

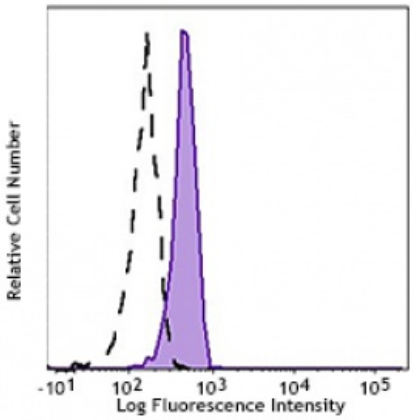
Immunogen: Human Stat3 peptide phosphorylated at Ser 727. Complete Freund's adjuvant.

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood monocytes were treated with (filled histogram), or without (open histogram), Cell Activation Cocktail (Cat. No. 423301) for 15 minutes, fixed with Fixation Buffer (Cat. No. 420801), permeabilized with True-Phos™ Perm Buffer (C

Applications:

Applications: Intracellular Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Phos™ Perm Buffer in Whole Blood Protocol. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

Application Notes: The STAT3 Phospho (Ser727) antibody recognizes the regulatory serine phosphorylation of human STAT3 protein.

Application References:

1. Akira S, *et al.* 1994. *Cell.* 77:63.
2. Zhang X, *et al.* 1995. *Science* 267:1990.
3. Sanchez-Margalet V, *et al.* 2001. *Cell. Immunol.* 211:30.
4. Simon A, *et al.*

Description: The STAT3 transcription factor is an important signaling molecule for many cytokines and growth factor receptors and is required for murine fetal development. STAT3 is an 88 kD member of the STAT (signal transducer and activators of transcription) protein family that is phosphorylated in response to a cytokine receptor-associated kinase activity. Stat3 is activated by phosphorylation at Tyr705, which induces dimerization, nuclear translocation, and DNA binding. Transcriptional activation was reported to be regulated by phosphorylation at Ser727 through the MAPK or mTOR pathways.

STAT3 forms both homo- and heterotrimers and is involved in the activation of genes required for cell growth and apoptosis. STAT3 is also involved in gp130

signaling and binds to IL-6 response elements in various acute phase protein promoters. STAT3 is phosphorylated by signaling from IFNs, EGF, FGF, IL-5, HGF, LIF, and BMP2. STAT3 activity is inhibited by PIAS3 and GRIM-19 and can also be regulated by the Rac1 protein.

Antigen References:

1. Akira S, *et al.* 1994. *Cell*. 77:63.
2. Zhang X, *et al.* 1995. *Science* 267:1990.
3. Sanchez-Margalet V, *et al.* 2001. *Cell. Immunol.* 211:30.
4. Simon A, *et al.*