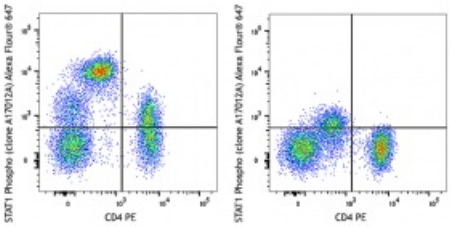
SONY

Product Data Sheet

Alexa Fluor® 647 anti-STAT1 Phospho (Tyr701)

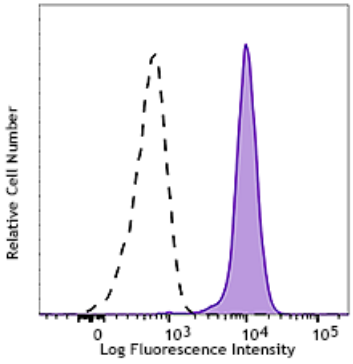
Catalog # / Size:	3932045 / 25 tests 3932050 / 100 tests
Clone:	A17012A
Isotype:	Mouse IgG1, κ
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.
Formulation:	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 mononuclear cells were treated with (left) or without (right) Recombinant Human IFN-γ (carrier-free) for 15 minutes, fixed with Fixation Buffer (Cat. No. 2704005), permeabilized with True-Phos™ Perm Buffer (Cat. No. 2727005), then stained with CD4 PE and anti-STAT1 Phospho (Tyr701) (clone A17012A) Alexa Fluor® 647. Data was gated on lymphocyte and monocyte populations.

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 Cell Suspensions Protocol. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.
Application Notes:	Clone A17012A recognizes STAT1 phosphorylated at Tyrosine 701 (Tyr701). When using this clone for ICC, we recommend using methanol to permeabilize fixed cells.



Human peripheral blood monocytes were treated with (filled histogram) or without (open histogram) Recombinant Human IFN-γ (carrier free) for 15 minutes, fixed with Fixation Buffer (Cat. No. 2704005), permeabilized with True-Phos™ Perm Buffer (Cat No. 2727005), then stained with anti-STAT1 Phospho (Tyr701) (clone A17012A) PerCP/Cyanine5.5.

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 at Tyrosine 701 (Tyr701) by receptor-associated kinases, including JAK1, JAK2, and TYK2. This results in STAT1 dimerization and subsequent translocation to the nucleus, where it functions as a transcriptional activator. STAT1 is involved in IFN-mediated immune responses, and STAT1-deficient mice are highly sensitive to bacterial and viral infections.

Antigen References:

1. Moretti S, et al. 2017. J. Biol. Chem. 292: 1785.
2. Wei J, et al. 2015. J. Immunol. 195: 2870.
3. Sung PS, et al. 2015. Proc. Natl. Acad. Sci. USA. 112: 10443
4. Ooi EL, et al. 2014. Proc. Natl. Acad. Sci. USA. 111: 1909.
5. Wu TR, et al. 2002. J. Biol. Chem. 277: 47572.
6. Horvath, et al. 1996. J. Virol. 70: 647.
7. Haque SJ, et al. 1995. J. Biol. Chem. 270: 25709.