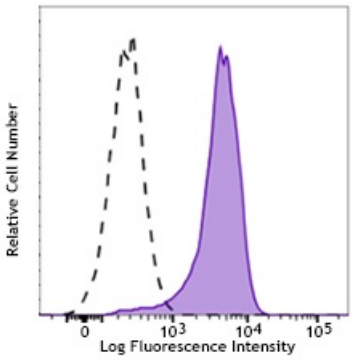
SONY

Product Data Sheet

Brilliant Violet 421™ anti-STAT6 Phospho (Tyr641)

Catalog # / Size:	4030100 / 100 tests 4030095 / 25 tests
Clone:	A15137E
Isotype:	Mouse IgG1, κ
Immunogen:	Human STAT6 peptide phosphorylated at Tyr 641
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Workshop Number:	HCDM listed
Concentration:	Lot-specific



Human peripheral blood lymphocytes were stimulated with (filled histogram) or without (open histogram) IL-4 for 15 minutes, fixed with Fixation Buffer, permeabilized with True-Phos™ Perm Buffer, and intracellularly stained with STAT6 Phospho (Tyr 641) (clone A15137E) Brilliant Violet 421™.

Applications:

Applications: Intracellular Staining for 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. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

Application Notes: Human STAT6 has three isoforms; the molecular weights are 94, 82 and 74kD. The immunogen (phosphorylated peptide) is shared by these three isoforms. This antibody recognizes STAT6 Phospho (Tyr641) in all three isoforms. The predominant band detected is at 94 kD.

Clone A15137E does not react with mouse.

This clone is not recommended for ChIP (Chromatin Immunoprecipitation) assays (as determined by in-house testing).

Application References:
1. Tsujisaki M, *et al.* 1991. *Clin. Exp. Immunol.* 85:3.
2. Kanwar JR, *et al.* 2003. *Cancer Gene Ther.* 10:468.
3. Kohka H, *et al.* 1998. *J. Leukoc. Biol.* 64:519.

Description: STAT6 is a member of the signal transducer and activator of transcription (STAT) family, activating gene expression in response to IL-4 and IL-13 stimulation. Upon cytokine stimulation, the receptor is phosphorylated by the associated Janus Kinases (Jak), followed by recruiting cytoplasmic STAT6. The Tyr641 residue of STAT6 is, in turn, phosphorylated by Jak. Phosphorylated STAT6 forms homodimers, translocates to the nucleus, and regulates transcription of target genes. STAT6 plays crucial roles in differentiation of T helper 2 (Th2) cells, class switch of immunoglobulins in B cells, expression of cell surface markers such as MHC class II, and the development of allergic inflammation.

Antigen References:
1. Goenka S, *et al.* 2011. *Immunol. Res.* 50:87.
2. Wurster AL, *et al.* 2000. *Oncogene* 19:2577.
3. Akira S. 1999. *Stem Cells* 17:138.
4. Zamorano J, *et al.* 2005. *J. Immunol.* 174:2843.
5. David M, *et al.* 2001. *Oncogene* 20:6660.
6. Takeda K, *et al.* 1996. *Nature* 380:627.