

Datasheet for ABIN1177205

anti-STAT4 antibody (pTyr693) (Alexa Fluor 647)





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Quantity:	50 tests
Target:	STAT4
Binding Specificity:	pTyr693
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This STAT4 antibody is conjugated to Alexa Fluor 647
Application:	Intracellular Staining (ICS)

Product Details

Brand:	BD Phosflow™
Immunogen:	Phosphorylated Human Stat4 (pY693)
Clone:	38-p
Isotype:	lgG2b kappa
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	STAT4
Alternative Name:	Stat4 (STAT4 Products)

Target Details

Background:

The Stat proteins function both as cytoplasmic signal transducers and as activators of transcription. Seven mammalian Stat proteins have been identified: Stat1-4, Stat5a, 5b, and Stat6. Stat4 has been shown to play an important role in development of T helper cells, specifically the Th1 subset. Stat4 is activated by IL-12 and by type 1 interferons. Knockout mice supported the role that Stat4 plays in IL-12 signaling because lymphocytes from Stat 4-/- mice could not differentiate into Th1 cells or produce IFNgamma in response to treatment with IL-12. IFNgamma plays an important role in host defense. A key component in the activation of Stat4 is the phosphorylation on tyrosine and serine residues in response to IL-12 stimulation. IL-12 stimulation leads to the phosphorylation of Stat4 on tyrosine 693 and serine 721. Transcriptional activity of Stat4 has been shown to be significantly reduced when residues Y693 and S721 are mutated.

Pathways:

JAK-STAT Signaling

Application Details

Sample Volume:	20 μL
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which
	should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The
	antibody was conjugated to Alexa Fluor® 647 under optimum conditions, and unreacted Alexa
	Fluor® 647 was removed.

Publications

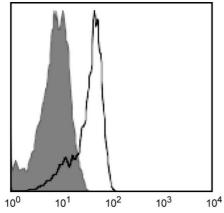
Product cited in:

Kisseleva, Bhattacharya, Braunstein, Schindler: "Signaling through the JAK/STAT pathway, recent advances and future challenges." in: **Gene**, Vol. 285, Issue 1-2, pp. 1-24, (2002) (PubMed).

Visconti, Gadina, Chiariello, Chen, Stancato, Gutkind, OShea: "Importance of the MKK6/p38 pathway for interleukin-12-induced STAT4 serine phosphorylation and transcriptional activity." in: **Blood**, Vol. 96, Issue 5, pp. 1844-52, (2000) (PubMed).

Images

Relative Cell Number



Alexa Fluor 647 Stat4 (pY693)

Flow Cytometry

Image 1.