abcam

ab278726

APC Anti-STAT6 (phospho Y641) antibody [Stat6Y641-G12]

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	APC
Excitation/Emission	Ex: 650nm, Em: 660nm
Storage buffer	Preservative: 0.09% Sodium azide Constituents: PBS, 0.2% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human STAT6 pY641. The exact immunogen used to generate this antibody is proprietary information. Database link P42226
Clone number	Stat6Y641-G12
Purification technique	Affinity purification Protein A/G
Light chain type	kappa

Reactivity data

Flow Cyt

Tested

Species	Human

Dilution info	5 µL for 10^6 Cells
Notes	-

Target data

See full target information STAT6 pY641

Function	Carries out a dual function: signal transduction and activation of transcription. Involved in IL4/interleukin-4- and IL3/interleukin-3-mediated signaling.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Notes

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	STAT6 also known as Signal Transducer and Activator of Transcription 6 is a transcription factor with a mass of around 94 kDa. This protein is an important component in the signaling pathways that respond to cytokines especially those of the IL-4 and IL-13 receptors. STAT6 mainly expresses in immune cells including T cells B cells and macrophages. It exists in the cytoplasm until the cytokine stimulation prompts its phosphorylation and translocation to the nucleus where it influences gene expression.

Biological function summary	STAT6 plays a central role in the development and function of Th2 cells a subset of T helper cells. The protein controls genes linked to the immune response and inflammation such as IL-4 and IL-13 by binding to specific DNA sequences as part of the transcriptional complex. These processes are critical for antibody class switching in B cells and also for regulating the differentiation of T cells which are processes important in defending against parasitic infections and are linked to allergies.
Pathways	STAT6 functions mainly in the JAK-STAT signaling pathway a pathway important for transmitting information from chemical signals outside cells to the cell nucleus resulting in DNA transcription. Within this pathway STAT6 works closely with JAK1 and JAK3 kinases which phosphorylate STAT6 enabling its activation. The protein also connects with other members of the STAT family like STAT1 and STAT3 during overlapping signaling processes.
Associated diseases and disorders	STAT6 has associations with asthma and certain types of cancer such as colorectal cancer. In asthma STAT6 influences the production of IgE and eosinophilic inflammation often connected to allergic responses. Meanwhile STAT6 promotes tumorigenesis in some cancers by regulating genes responsible for cell survival and proliferation. It connects with proteins like IL-4 and IL-13 in these disorders which suggests potential therapeutic targets for treatment.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

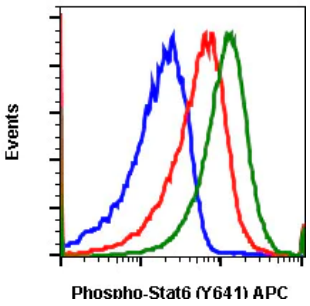
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

1 product image



Flow Cytometry - APC Anti-STAT6 (phospho Y641) antibody [Stat6Y641-G12] (ab278726)

STAT6 (phospho Y641) Flow Cytometry staining using rabbit Anti-STAT6 (phospho Y641) antibody

Flow cytometric analysis of U937 cells unstained and untreated cells as negative control (blue) or stained and untreated (red) or treated with IFNa plus IL-4 (green) using ab278725.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.