abcam

ab223682

Anti-STAT5a antibody

Key facts

Isotype	IgG
Host species	Goat
Storage buffer	pH: 7.3 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human STAT5A aa 650 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link P42229
Purification technique	Affinity purification Immunogen
Specificity	ab223682 is not expected to cross-react with STAT5B.
Purification notes	ab223682 was purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Reactivity data

WB

Tested

Species	Human
Dilution info	0.1-0.3 µg/mL
Notes	1 hour primary incubation is recommended for this product.

Predicted

Species	Mouse, Rat, Sheep, Cow, Dog
Dilution info	-
Notes	-

IHC-P

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse, Rat, Sheep, Cow, Dog
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	10 µg/mL
Notes	-

Predicted

Species	Mouse, Rat, Sheep, Cow, Dog
Dilution info	-
Notes	-

Target data

See full target information STAT5A

Function	Carries out a dual function: signal transduction and activation of transcription. Mediates cellular responses to the cytokine KITLG/SCF and other growth factors. Mediates cellular responses to ERBB4. May mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4. Binds to the GAS element and activates PRL-induced transcription. Regulates the expression of milk proteins during lactation.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

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

Activity summary	STAT5a also known as Signal Transducer and Activator of Transcription 5A acts as a transcription factor in the cell. STAT5a weighs approximately 90 kDa and expresses in various tissues including the liver muscle and hematopoietic cells. It plays a central role in mediating cellular responses to cytokines and growth factors particularly those in the interleukin-2 (IL-2) family and growth hormone (GH).
Biological function summary	Many systems use STAT5a to regulate cell proliferation differentiation and survival. It often forms a complex with other proteins like STAT5b which is a closely related counterpart and both contribute to similar cellular processes. STAT5a can dimerize upon activation allowing it to move to the cell nucleus to influence gene expression directly.
Pathways	Researchers place STAT5a prominently in the JAK-STAT signaling pathway. This pathway is essential for transmitting information received from extracellular chemical signals to the cell nucleus resulting in the activation of genes controlling cellular functions. STAT5a works together with Janus kinases (JAKs) to mediate various biological responses including hormone signaling and immune function. It also interacts with proteins like IL-2 receptor subunits which are involved in many cytokine-driven processes.
Associated diseases and disorders	Disturbances in STAT5a activity link specifically with conditions like leukemia and breast cancer. Overactivation or mutation can lead to uncontrolled cell growth and

survival contributing to these diseases. In leukemia STAT5a frequently partners with other proteins like BCR-ABL which is known for its role in chronic myeloid leukemia influencing oncogenic pathways. In breast cancer alterations in STAT5a signaling may interact with estrogen and progesterone receptors affecting tumor progression and response to therapies.

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

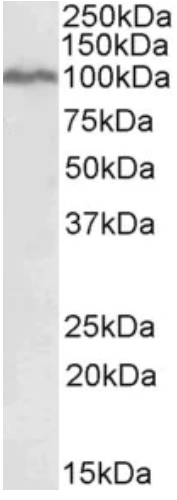
We do not recommend this combination. It is not covered by our product promise.

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.

2 product images



Western blot - Anti-STAT5a antibody (ab223682)

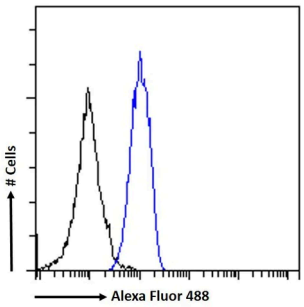
Primary incubation was 1 hour.
All lanes:
Western blot - Anti-STAT5a antibody (ab223682) at 0.1 µg/mL

All lanes:
K562 (human chronic myelogenous leukemia cell line from bone marrow) cell lysate in RIPA buffer at 35 µg

Developed using the ECL technique.

Predicted band size: 90 kDa

Observed band size: 100 kDa



Flow Cytometry - Anti-STAT5a antibody (ab223682)

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