

ARG41627 anti-STAT5A + STAT5B antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes STAT5A + STAT5B
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	STAT5A + STAT5B
Species	Human
Immunogen	Synthetic peptide of Human STAT5A/B.
Conjugation	Un-conjugated
Alternate Names	STAT5A: Signal transducer and activator of transcription 5A; STAT5; MGF STAT5B: STAT5

Application Instructions

Application table	Application	Dilution
	FACS	1:50
	ICC/IF	1:50 - 1:200
	IHC-P	1:100 - 1:500
	IP	1:50
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Jurkat	
Observed Size	~ 88 kDa	

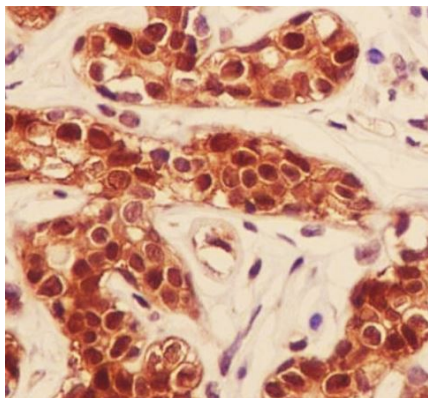
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

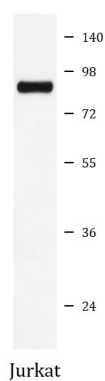
Bioinformation

Gene Symbol	STAT5A; STAT5B
Gene Full Name	signal transducer and activator of transcription 5A; signal transducer and activator of transcription 5B
Background	<p>STAT5A and STAT5B are members of the STAT family of transcription factors. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators.</p> <p>STAT5A: This protein is activated by, and mediates the responses of many cell ligands, such as IL2, IL3, IL7 GM-CSF, erythropoietin, thrombopoietin, and different growth hormones. Activation of this protein in myeloma and lymphoma associated with a TEL/JAK2 gene fusion is independent of cell stimulus and has been shown to be essential for tumorigenesis. The mouse counterpart of this gene is found to induce the expression of BCL2L1/BCL-X(L), which suggests the antiapoptotic function of this gene in cells. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Dec 2013]</p> <p>STAT5B: This protein mediates the signal transduction triggered by various cell ligands, such as IL2, IL4, CSF1, and different growth hormones. It has been shown to be involved in diverse biological processes, such as TCR signaling, apoptosis, adult mammary gland development, and sexual dimorphism of liver gene expression. This gene was found to fuse to retinoic acid receptor-alpha (RARA) gene in a small subset of acute promyelocytic leukemias (APLL). The dysregulation of the signaling pathways mediated by this protein may be the cause of the APLL. [provided by RefSeq, Jul 2008]</p>
Function	<p>STAT5A: 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. [UniProt]</p> <p>STAT5B: Carries out a dual function: signal transduction and activation of transcription. Mediates cellular responses to the cytokine KITLG/SCF and other growth factors. Binds to the GAS element and activates PRL-induced transcription. Positively regulates hematopoietic/erythroid differentiation.</p>
Calculated Mw	91 kDa
PTM	<p>STAT5A: Tyrosine phosphorylated in response to KITLG/SCF, IL2, IL3, IL7, IL15, CSF2/GMCSF, GH1, PRL, EPO and THPO. Activated KIT promotes phosphorylation on tyrosine residues and subsequent translocation to the nucleus. Tyrosine phosphorylated in response to constitutively activated FGFR1, FGFR2, FGFR3 and FGFR4. Tyrosine phosphorylation is required for DNA-binding activity and dimerization. Serine phosphorylation is also required for maximal transcriptional activity (By similarity). Tyrosine phosphorylated in response to signaling via activated FLT3; wild-type FLT3 results in much weaker phosphorylation than constitutively activated mutant FLT3. Alternatively, can be phosphorylated by JAK2 at Tyr-694. Dephosphorylation on tyrosine residues by PTPN2 negatively regulates prolactin signaling pathway.</p> <p>ISGylated. [UniProt]</p> <p>STAT5B: Tyrosine phosphorylated in response to signaling via activated KIT, resulting in translocation to the nucleus. Tyrosine phosphorylated in response to signaling via activated FLT3; wild-type FLT3 results in much weaker phosphorylation than constitutively activated mutant FLT3. Alternatively, can be phosphorylated by JAK2. Phosphorylation at Tyr-699 by PTK6 or HCK leads to an increase of its transcriptional activity. Dephosphorylation on tyrosine residues by PTPN2 negatively regulates prolactin signaling pathway. [UniProt]</p>
Cellular Localization	<p>STAT5A: Cytoplasm. Nucleus. Note=Translocated into the nucleus in response to phosphorylation. [UniProt]</p> <p>STAT5B: Cytoplasm. Nucleus. Note=Translocated into the nucleus in response to phosphorylation. [UniProt]</p>



ARG41627 anti-STAT5A + STAT5B antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast tissue stained with ARG41627 anti-STAT5A + STAT5B antibody.



ARG41627 anti-STAT5A + STAT5B antibody WB image

Western blot: Jurkat cell lysate stained with ARG41627 anti-STAT5A + STAT5B antibody.