

Rabbit Anti-phospho-STAT5a (Tyr694)/AP Conjugated antibody

SL5621R-AP

Product Name	Anti-phospho-STAT5a(Tyr694)/AP
Chinese Name	碱性磷酸酶（AP）标记的磷酸化 Signal transduction 和转录激活因子 5a 抗体
Alias	STAT5a (phospho Y694); p-STAT5a(Tyr694); STAT5A(phospho Y694); Mammary gland factor; Mammary gland factor; MGF; MGF; Signal transducer and activator of transcription 5A; Signal transducer and activator of transcription 5A; STA5A_HUMAN; STAT 5; STAT 5A; STAT5A.
Product Type	Phosphorylated anti
Research Area	Chromatin and nuclear signals Signal transduction Epigenetics
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human(predicted:Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,Sheep) ELISA=1:500-5000
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	91kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated Synthesised phosphopeptide derived from human STAT5a around the phosphorylation site of Tyr694
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Storage	
Product Detail	background:

The protein encoded by this gene is a member 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. 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 the 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. [provided by RefSeq, Jul 2008]

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.

Subunit:

Forms a homodimer or a heterodimer with a related family member. Binds NR3C1 (By similarity). Interacts with NCOA1 and SOCS7. Interacts with ERBB4.

Subcellular Location:

Cytoplasm. Nucleus. Note=Translocated into the nucleus in response to phosphorylation.

Post-translational modifications:

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.

Similarity:

Belongs to the transcription factor STAT family.

Contains 1 SH2 domain.

Database links:

[Entrez Gene: 6776](#) Human

[Entrez Gene: 20850](#) Mouse

[Entrez Gene: 24918](#) Rat

[Omim: 601511](#) Human

[SwissProt: P42229](#) Human

[SwissProt: P42230](#) Mouse

[SwissProt: Q62771](#) Rat

[Unigene: 437058](#) Human

[Unigene: 277403](#) Mouse

[Unigene: 154399](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.