

Phospho-STAT5a(Y694) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3268a**Specification**

Phospho-STAT5a(Y694) Antibody - Product Information

Application	IF, WB, IHC-P,E
Primary Accession	P42229
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

Phospho-STAT5a(Y694) Antibody - Additional Information**Gene ID** 6776**Other Names**

Signal transducer and activator of transcription 5A, STAT5A, STAT5

Target/Specificity

This STAT5a Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y694 of human STAT5a.

Dilution

IF~~1:200

WB~~1:1000

IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-STAT5a(Y694) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-STAT5a(Y694) Antibody - Protein Information**Name** STAT5A**Synonyms** STAT5**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.

Cellular Location

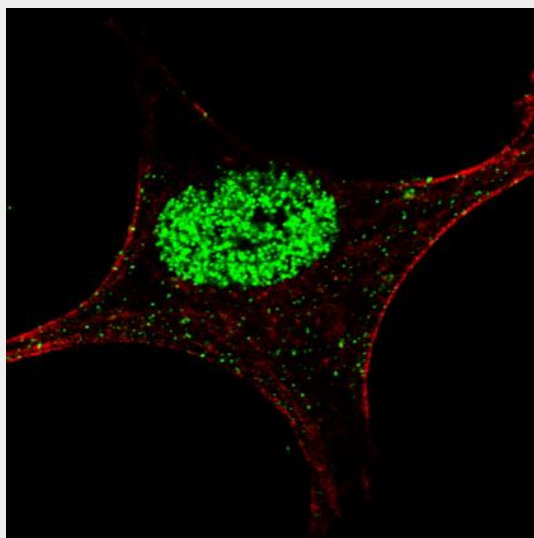
Cytoplasm. Nucleus. Note=Translocated into the nucleus in response to phosphorylation

Phospho-STAT5a(Y694) Antibody - Protocols

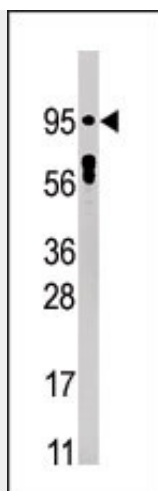
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

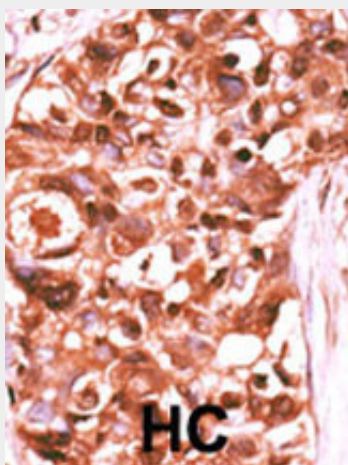
Phospho-STAT5a(Y694) Antibody - Images



Fluorescent confocal image of an SY5Y cell stained with AP3268a Phospho-STAT5a antibody. SY5Y cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min), then incubated with AP3268a Phospho-STAT5a primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (5.25 μ M, 25 min). Nuclei were counterstained with Hoechst 33342 (blue) (10 μ g/ml, 3 min)(not shown). Phospho-STAT5a immunoreactivity is localized exclusively to the nucleus.



Western blot analysis of anti-Phospho-STAT5 Pab(Cat. #AP3268a) in HepG2 cell line lysate (35ug/lane). Phospho-STAT5(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Phospho-STAT5a(Y694) Antibody - Background

STAT5a 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 protein is found to induce the expression of BCL2L1/BCL-X(L), which suggests the antiapoptotic function of this protein in cells.

Phospho-STAT5a(Y694) Antibody - References

Martens, N., et al., J. Biol. Chem. 280(14):13817-13823 (2005).
Defilippi, P., et al., J. Cell Biol. 168(7):1099-1108 (2005).
Sekine, Y., et al., J. Biol. Chem. 280(9):8188-8196 (2005).
Sultan, A.S., et al., Oncogene 24(5):746-760 (2005).

Moriggl, R., et al., Cancer Cell 7(1):87-99 (2005).

Phospho-STAT5a(Y694) Antibody - Citations

- [Bone marrow-targetable Green Tea Catechin-Based Micellar Nanocomplex for synergistic therapy of Acute myeloid leukemia](#)
- [O-GlcNAcylation disrupts STRA6-retinol signals in kidneys of diabetes.](#)
- [Tissue proteomics of the human mammary gland: towards an abridged definition of the molecular phenotypes underlying epithelial normalcy.](#)