

#### Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody Stat5 phospho Y694 Antibody Catalog # ASR4176

## Specification

## Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Mouse Unconjugated Mouse Human, Mouse Monoclonal WB, IHC, E, I, LCI Phospho STAT5 pY694 monoclonal antibody has been tested by ELISA, western blot, immunohistochemistry, and immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 91 kDa in size corresponding to phosphorylated Stat5a protein by western blotting in the appropriate cell lysate or extract. This phospho-specific monoclonal antibody reacts with mouse Stat5a pY694 and shows minimal reactivity by ELISA against the non-phosphorylated form of the immunizing peptide.
Physical State Buffer	Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-STAT5 phospho Y694 monoclonal antibody was produced by repeated immunizations with a synthetic peptide corresponding to residues surrounding Y694 of mouse STAT5a protein.
Preservative	0.01% (w/v) Sodium Azide

## Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - Additional Information

Gene ID 20850

Other Names 20850

Purity

Phospho STAT5 pY694 was purified from concentrated tissue culture supernate by Protein A chromatography. This antibody is specific for mouse Stat5a protein phosphorylated at Y694. A BLAST analysis was used to suggest cross-reactivity with Stat5a from human, mouse and rat based on 100% homology with the immunizing sequence. Cross-reactivity with Stat5a from other sources has not been determined.



#### **Storage Condition**

Store STAT5 phospho Y694 Antibody at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Phospho STAT5 antibody is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note** This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - Protein Information

Name Stat5a

Synonyms Mgf, Mpf

Function

Carries out a dual function: signal transduction and activation of transcription. Mediates cellular responses to the cytokine KITLG/SCF and other growth factors. 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

**Tissue Location** 

In the virgin, found in most tissues except brain and muscle. During lactation, abundantly found in mammary tissue, as well as in other secretory organs such as salivary gland and seminal vesicle

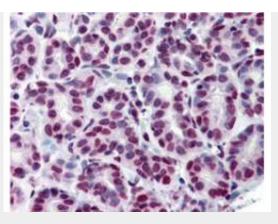
## Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - Images





Immunohistochemistry of Monoclonal Anti-Stat5 pY694 Antibody. Tissue: human breast tissue (40X). Fixation: formalin fixed paraffin embedded (FFPE). Antigen retrieval: steam sections in 0.1 M sodium citrate buffer, pH 6, for 20 min. Rinse with 1XTBST. Primary antibody: Anti-Stat5pY694 at 20  $\mu$ g/mL. Localization: breast epithelium with moderate nuclear staining. Staining: Stat5 pY694 as precipitated red signal, with a hematoxylin purple nuclear counterstain. Personal communication, Andrew Elston, Lifespan Biosciences, Seattle, WA.

# Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - Background

Signal transducer and activator of transcription 5 (Stat5) belongs to a family of cytoplasmic transcription factors that can be activated (phosphorylated) by a cell surface receptor. Phosphorylation at Tyr694 is obligatory for Stat5 activation. Stat5 has two isoforms, Stat5 $\alpha$  []and Stat5 $\beta$ . Aberrant Stat5 activation has been implicated in the pathogenesis of chronic myelogenous leukemia, prostate and breast cancer and tumor metastasis. Stat5 is localized in the cytoplasm and upon phosphorylation at Y694 is translocated to the nucleus. Ideal for Cancer, Chromatin & Nuclear Signaling and Signal Transduction research.