

Mouse anti STAT5 Monoclonal Antibody

Alternative Name(s): Signal transducer and activator of transcription 5 (STAT5)

Order Information

Description: STAT5
Catalogue: 606-300
Lot: See label
Size: 100ug/200ul
Host: Mouse
Clone: 205.0

• Application: IHC(P), WB

• Reactivity: Hu

ANTIGEN PREPARATION

A synthetic peptide STAT5

BACKGROUND

Signal transducer and activator of transcription 5 (STAT5) 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 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. STAT5 has been found to be constitutively phosphorylated in cancer cells. In prostate cancer, the components of the JAK2- STAT5A/B signaling pathway provide molecular targets for small-molecule inhibition of survival and growth signals of the cells. At the same time, new evidence suggests that the STAT5A/B signaling pathway is involved in the transition of organ-confined prostate cancer to hormonerefractory disease. In breast cancer, the role of STAT5A/B is more complex.

PURIFICATION

The mouse IgG is purified by Protein A-Affinity Chromatography according to Isotyping

FORMULATION

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

SPECIFICITY

This antibody recognizes human STAT5 protein. The other species are not tested.

STORAGE

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

Western Blot: 0.1-1 µg/ml

• ELISA: 0.01-0.1 μg/ml

• Immunoprecipitation: 2-5 µg/ml

• IHC: 2-10 µg/ml

· Flow cytometry: Not tested

• Molecular Weight: 86.0

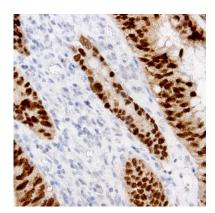
• Positive Control: Kidney Tissue

Cellular Location: Cell Membrane



*Optimal dilutions should be determined by researchers for the specific applications.





Immunohistochemistry: Human colon carcinoma (FFPE) stained with Mouse anti- STAT5 (Cat# 606-300) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min

REFERENCES