



STAT3 Mouse Monoclonal Antibody

E10-30122

Background: The Stat3 transcription factor is an important signaling molecule for many cytokines and growth-factor receptors and is required for murine fetal development. Stat3 is constitutively activated in a number of human tumors and possesses oncogenic potential and anti-apoptotic activities. Stat3 is activated by phosphorylation at Tyr705, which induces dimerization, nuclear translocation and DNA binding. Transcriptional activation seems to be regulated by phosphorylation at Ser727 through the MAPK or mTOR pathways. Stat3 isoform expression appears to reflect biological function as the relative expression levels of Stat3 α (86 kDa) and Stat3 β (79 kDa) depend on cell type, ligand exposure or cell maturation stage. It is notable that Stat3 β lacks the serine phosphorylation site within the carboxy-terminal transcriptional activation domain. Tissue specificity: Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

Catalog Number: E10-30122
Amount: 100 μ g/100 μ l
Clone Number: 3B5
Species: Mouse IgG1
MW: 88kDa
Aliases: APRF; HIES; FLJ20882; MGC16063; STAT3
Entrez Gene: 6774
Immunogen: Purified recombinant fragment of human STAT3 expressed in E. Coli.
Storage: Store at 4°C, for long term storage, store at -20°C.
Formulation: Ascitic fluid containing 0.03% sodium azide.
Species Reactivities: Human; Mouse; Monkey
Tested Applications: WB, IHC, IF, ELISA. Not yet tested in other applications.
Application notes: WB: 1/500 - 1/2000, IHC: 1/200 - 1/1000, IF: 1/200 - 1/1000, ELISA: Propose dilution 1/10000.

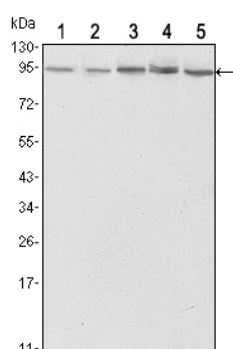


Figure 1: Western blot analysis using STAT3 mouse mAb against Hela (1), NIH/3T3 (2), Jurkat (3), PC-12 (4) and COS7 (5) cell lysate.

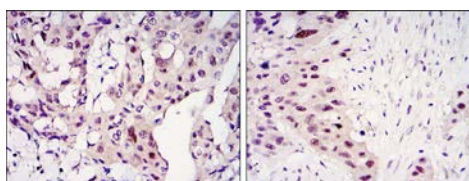


Figure 2: Immunohistochemical analysis of paraffin-embedded mammary cancer tissues (left) and lung cancer tissues (right) using STAT3 mouse mAb with DAB staining.

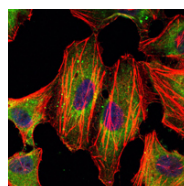


Figure 3: Immunofluorescence analysis of Hela cells using STAT3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

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