

Mouse Anti-STAT3 [MD312]: MC0610, MC0610RTU7

Intended Use: For Research Use Only

Description: Membrane receptor signaling by various ligands, including interferons and growth hormones such as EGF, induces activation of JAK kinases which then leads to tyrosine phosphorylation of proteins that have been designated Stats (signal transducers and activators of transcription. STAT1 and STAT2 are induced by IFN- α and form a heterodimer which is part of the ISGF3 transcription factor complex. Although early reports indicate Stat3 activation by EGF and IL-6, it has been shown that STAT3 β appears to be activated by both while STAT3 α is activated by EGF, but not by IL-6. Highest expression of Stat4 is seen in testis and myeloid cells. STAT3 may localize to the nucleus or the cytoplasm. IL-12 has been identified as an activator of STAT4. STAT5 has been shown to be activated by prolactin and by IL-3. STAT6 is involved in IL-4 activated signaling pathways.

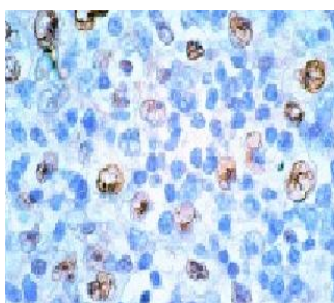
Specifications

Clone: MD312
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human, mouse, rat
 Immunogen: Human STAT3 N-terminus protein aa 50-240
 Localization: Cytoplasm or nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and \leq 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt., ELISA, ICC/IF, IP, WB
 Package:

| Description | Catalog No. | Size |
|--------------------|-------------|------|
| STAT3 Concentrated | MC0610 | 1 ml |
| STAT3 Prediluted | MC0610RTU7 | 7 ml |

IHC Procedure

Positive Control Tissue: Lymphoma, fallopian tube tissue
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker, or 30-60 minutes water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human human lymphoma stained with anti-STAT3 using DAB

References:

1. STAT3/LKB1 controls metastatic prostate cancer by regulating mTORC1/CREB pathway. Jan Pencik, et al. Mol Cancer. Aug 12;22(1):133, 2023.
2. Leptin production capacity determines food intake and susceptibility to obesity-induced diabetes in Oikawa-Nagao Diabetes-Prone and Diabetes-Resistant mice. Akira Asai, et al. Diabetologia. Sep;63(9):1836-1846, 2020.