Product Type: Recombinant rabbit monoclonal IgG, primary antibodies

Species reactivity: Human, Mouse, Rat, Zebra fish

Applications: WB, ICC/IF, IHC, IP

Molecular Wt.: 88 kDa

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 the various Stat transcription factors. 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 Stat3β appears to be activated by both while Stat3α is activated by EGF, but not by IL-6. Highest expression of Stat4 is seen in testis and myeloid cells. 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.

Immunogen: Recombinant protein.

Positive control: CRC, SHG-44, Hela, SW480, human colon cancer tissue, human pancreas tissue, mouse pancreas tissue, mouse brain tissue.

Subcellular location: Cytoplasm, Nucleus.

Database links: SwissProt: P40763 (Human) P42227 (Mouse) P52631 (Rat)

Recommended Dilutions:
- WB: 1:1,000
- IHC: 1:50–1:200
- ICC: 1:50–1:200

Storage Buffer:
1*TBS (pH7.4), 1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction:
Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

Purity: ProA affinity purified.

Fig1: Western blot analysis of Stat3 on different lysates using anti-Stat3 antibody at 1/1,000 dilution.

Positive control:
Lane 1: Hela
Lane 2: SHG-44
Lane 3: SW480

Fig2: ICC staining Stat3 in CRC cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Fig3: Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-Stat3 antibody. Counter stained with hematoxylin.
Background References
