

Stat3 (N-terminal region)

Cat. # SM2631

Host Mouse Monoclonal IgG1

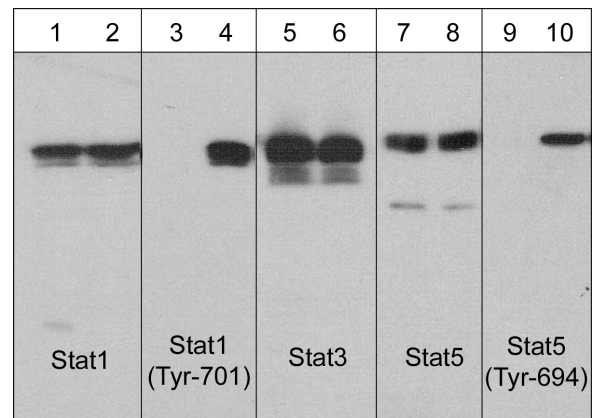
Size 100 µl

Background:

The stat proteins (Stat1-6) function both as cytoplasmic signal transducers and as activators of transcription in response to cytokines and growth factor receptors. Stat3 is expressed as two variants, Stat3 α (86 kDa) and Stat3 β (79 kDa) that can differ in expression and activity depending on cell type, activation pathway, and cell maturation stage. Both are activated by phosphorylation at Tyr-705, which induces dimerization, nuclear translocation and DNA binding. Stat3 α (86 kDa) transcriptional activation may be regulated by phosphorylation at Ser-727 through the MAPK pathway, while Stat3 β lacks this serine site.

References

- Darnell, J.E. (1997) Science 277:1630.
Biethahn, S. et al. (1999) Exp. Hematol. 27:885.
Wen, Z. et al. (1995) Cell 82:241.



Western blot analysis of human A431 cells untreated (lanes 1, 3, 5, 7, & 9) or treated with EGF (100 nM) for 60 min (lanes 2, 4, 6, 8, & 10). The blots were probed with anti-Stat1 (lanes 1 & 2), anti-Stat1 (Tyr-701) (lanes 3 & 4), anti-Stat3 (lanes 5 & 6), anti-Stat5 (lanes 7 & 8), and anti-Stat5 (Tyr-694) (lanes 9 & 10).

Immunogen:

Clone (M263) was generated from a recombinant protein that included amino acid residues in the N-terminal region of human Stat3. This sequence has high homology to the conserved regions in rat and mouse Stat3 α and β .

Applications:

WB 1:1000
ELISA 1:2000
IP 1:100

End user should determine optimal dilution for their particular applications and experiments. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

Related Products:

SM2491 Stat1 Mouse Monoclonal
SM1351 Stat1 (Tyr-701), phospho-specific Mouse Monoclonal
SM2511 Stat5 (C-terminal region) Mouse Monoclonal
SM1481 Stat5 (Tyr-694), phospho-specific Mouse Monoclonal
PM1381 p38a MAP Kinase (C-terminal) Mouse Monoclonal
PM1391 p38 MAP Kinase (Thr-180/Tyr-182), phospho-specific Mouse Monoclonal

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Buffer and Storage:

Mouse monoclonal antibody purified with protein A chromatography is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

Specificity:

The antibody detects 86 and 79 kDa* bands corresponding to Stat3 isoforms on SDS-PAGE immunoblots of human A431 cells.

*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

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