

STAT1 phospho Ser727 antibody (pAb)

Catalog Nos: 39633, 39634

RRID: AB_2793283

Isotype: Serum

Application(s): DB, WB

Reactivity: Human

Volumes: 200 µl, 10 µl

Purification: None

Host: Rabbit

Molecular Weight: 92 kDa

Background: STAT1 is a member of the STAT family of transcription factors. STATs undergo tyrosine and serine phosphorylation in response to growth factor or cytokine signaling. This phosphorylation results in dimerization and translocation of STAT proteins to the nucleus. STAT1 is alternatively spliced to give rise to STAT1 α and STAT1 β , both of which mediate interferon α activity, but only STAT1 α mediates interferon- γ activity. STAT1 plays a critical role in various forms of cell death, both apoptotic and non-apoptotic. The mechanisms of action are both by transcriptional activation of target genes, and by direct association with apoptotic regulators, including TRADD, p53, and HDAC (HDAC1, HDAC2, HDAC3, HDAC4, HDAC5, HDAC6 and HDAC11). STAT1 target genes include the pro-inflammatory genes for iNOS, COX, VCAM, and ICAM, making STAT1 an attractive anti-inflammatory target.

Immunogen: This STAT1 phospho Ser727 antibody was raised against a synthetic peptide containing phospho-serine 727 of human STAT1.

Buffer: Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

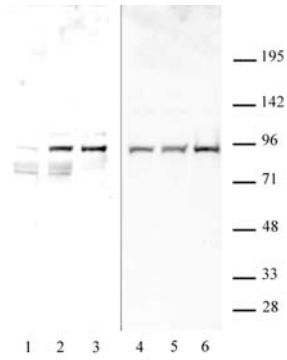
Application Notes:

Applications Validated by Active Motif:

WB: 1:500 - 1:1,000 dilution

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



STAT1 phospho Ser727 pAb tested by Western blot.

Lanes 1&4: Untreated HeLa whole-cell extract (20 µg). Lane 2&5: Whole-cell extract (20 µg) of HeLa cells treated with IFNα (2500U/ml for 30 min.). Lanes 3&6: Whole-cell extract (20 µg) of COS-7 cells treated with IFNγ (1000U/ml for 15 min.). Lanes 1-3 were probed with Cat. No. 39633 at 1:500. Lanes 4-6 probed with Cat. No. 39059 (STAT1 alpha pAb) at 1:1000.



STAT1 phospho Ser727 pAb tested by Dot blot.

Dot blot analysis was used to confirm the specificity of 39633 for STAT1 phospho Ser727. Phosphorylated peptides corresponding to the immunogen and related peptides were spotted onto PVDF and probed with 39633 at 1:500. The amount of peptide (picomoles) spotted is indicated next to each row. Lane 1: unmodified Ser727 STAT1 peptide. Lane 2: phospho Ser727 STAT1 peptide. Lane 3: unmodified Tyr689 STAT2 peptide. Lane 4: phospho Tyr689 STAT2 peptide. Lane 5: unmodified Ser727 STAT3 peptide. Lane 6: phospho Ser727 STAT3 peptide. Lane 7: unmodified Tyr705 STAT3 peptide. Lane 8: phospho Tyr705 STAT3 peptide. Lane 9: unmodified Ser726 STAT5A/Ser731 STAT5B peptide. Lane 10: phospho Ser726 STAT5A/Ser731 STAT5B peptide. Lane 11: unmodified Tyr694 STAT5A/Tyr699 STAT5B peptide. Lane 12: phospho Tyr694 STAT5A/Tyr699 STAT5B peptide.