

STAM (C-20): sc-6919

BACKGROUND

Cytokine stimulation of the IL-2 receptor leads to the tyrosine phosphorylation of a number of cellular proteins and to the induction of various transcription factors including c-Fos and c-Myc. The signal transducing adapter molecule, STAM, is speculated to play a role in c-Myc induction by various cytokines. STAM contains an SH3 (Src homology 3) motif as well as an immunoreceptor tyrosine-based activation (ITAM) motif, both of which appear to be required for c-Myc induction in response to IL-2 and GM-CSF. STAM associates with JAK3 and JAK2 via its ITAM region, and it is tyrosine phosphorylated by JAK3 and JAK2 after stimulation with IL-2 and GM-CSF, respectively.

REFERENCES

1. Miyazaki, T., et al. 1994. Functional activation of JAK1 and JAK3 by selective association with IL-2 receptor subunits. *Science* 266: 1045-1047.
2. Taniguchi, T. 1995. Cytokine signaling through nonreceptor protein tyrosine kinases. *Science* 268: 251-255.
3. Ihle, J.N., et al. 1995. Signaling through the hematopoietic cytokine receptors. *Annu. Rev. Immunol.* 13: 369-398.
4. Minami, Y., et al. 1995. Protein tyrosine kinase Syk is associated with and activated by the IL-2 receptors: possible link with the c-Myc induction pathway. *Immunity* 2: 89-100.
5. Kawahara, A., et al. 1995. Critical role for the Interleukin 2 (IL-2) receptor γ -chain-associated JAK3 in the IL-2 induced c-Fos and c-Myc, but not Bcl-2, gene induction. *Proc. Natl. Acad. Sci. USA* 92: 8724-8728.

CHROMOSOMAL LOCATION

Genetic locus: STAM (human) mapping to 10p12.33; Stam (mouse) mapping to 2 A1.

SOURCE

STAM (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of STAM of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6919 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support.

APPLICATIONS

STAM (C-20) is recommended for detection of STAM of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

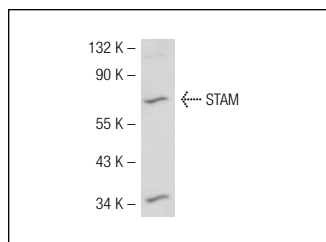
STAM (C-20) is also recommended for detection of STAM in additional species, including equine and bovine.

Suitable for use as control antibody for STAM siRNA (h): sc-41043, STAM siRNA (m): sc-41044, STAM shRNA Plasmid (h): sc-41043-SH, STAM shRNA Plasmid (m): sc-41044-SH, STAM shRNA (h) Lentiviral Particles: sc-41043-V and STAM shRNA (m) Lentiviral Particles: sc-41044-V.

Molecular Weight of STAM: 70 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or Jurkat whole cell lysate: sc-2204.

DATA



STAM (C-20): sc-6919. Western blot analysis of STAM expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Kapuralin, K., et al. 2012. Neurons and a subset of interstitial cells of Cajal in the enteric nervous system highly express Stam2 gene. *Anat. Rec.* 295: 113-120.



Try **STAM (B-2): sc-133093** or **STAM (D-3): sc-133092**, our highly recommended monoclonal alternatives to STAM (C-20).