

PIASx (m3): 293T Lysate: sc-110290

BACKGROUND

The IL-6-type family of cytokines, which includes IL-6 and a number of similar cytokines and growth factors, plays a significant role in regulating gene activation, proliferation and differentiation. Transcription factors of the Stat (signal transducer and activator of transcription) family are involved in IL-6 family-mediated signal transduction pathways and, upon activation, undergo phosphorylation, dimerization and translocation to the nucleus. The duration and intensity of a cell's response to cytokines can be adjusted by the effect of several regulatory mechanisms. One example involves the protein inhibitor of activated Stat family (PIAS family) of proteins, which act as negative regulators of Stats in cytokine signaling. PIAS proteins are able to co-activate steroid receptor-dependent transcription as well. PIASx transcript is alternatively spliced to yield two protein isoforms, PIASx- α and PIASx- β , which differ in their C-terminal regions. Similar to other members of the PIAS family, the predicted PIASx proteins contain a putative zinc-binding motif and a highly acidic region.

REFERENCES

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3. Heinrich, P.C., et al. 1998. Interleukin-6-type cytokine signalling through the gp130/JAK/Stat pathway. *Biochem. J.* 334: 297-314.
4. Liu, B., et al. 1998. Inhibition of Stat1-mediated gene activation by PIAS 1. *Proc. Natl. Acad. Sci. USA* 95: 10626-10631.
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7. Liu, B. and Shuai, K. 2001. Induction of apoptosis by protein inhibitor of activated Stat1 through c-Jun NH2-terminal kinase activation. *J. Biol. Chem.* 276: 36624-36631.

CHROMOSOMAL LOCATION

Genetic locus: *Pias2* (mouse) mapping to 18 E3.

PRODUCT

PIASx (m3): 293T Lysate represents a lysate of mouse PIASx transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

PIASx (m3): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PIASx antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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

PROTOCOLS

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