

PIASy (P-18): sc-30875

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 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 signal transducer and activator of transcription (Stat) family (PIAS family) of proteins, which act as negative regulators of Stats in cytokine signaling. PIAS proteins are able to coactivate steroid receptor-dependent transcription as well. Human PIASy is a 510 amino acid transcriptional corepressor of the androgen receptor (AR). In addition, PIASy may regulate p53-mediated events and may direct p53 into a transactivation-independent mode of apoptosis.

CHROMOSOMAL LOCATION

Genetic locus: PIAS4 (human) mapping to 19p13.3; Pias4 (mouse) mapping to 10 C1.

SOURCE

PIASy (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PIASy of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-30876 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

PIASy (P-18) is recommended for detection of PIASy of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

PIASy (P-18) is also recommended for detection of PIASy in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PIASy siRNA (h): sc-40851, PIASy siRNA (m): sc-40852, PIASy shRNA Plasmid (h): sc-40851-SH, PIASy shRNA Plasmid (m): sc-40852-SH, PIASy shRNA (h) Lentiviral Particles: sc-40851-V and PIASy shRNA (m) Lentiviral Particles: sc-40852-V.

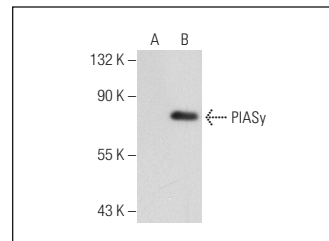
Molecular Weight of PIASy: 57 kDa.

Positive Controls: PIASy (h3): 293T Lysate : sc-170620 or MOLT-4 cell lysate: sc-2233.

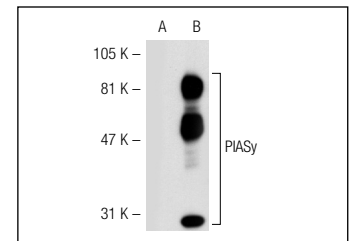
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PIASy (P-18): sc-30875. Western blot analysis of PIASy expression in non-transfected: sc-117752 (A) and human PIASy transfected: sc-170620 (B) 293T whole cell lysates.



PIASy (P-18): sc-30875. Western blot analysis of PIASy expression in non-transfected: sc-117752 (A) and human PIASy transfected: sc-114469 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Deng, Z., et al. 2007. PIASy-mediated sumoylation of Yin Yang 1 depends on their interaction but not the RING finger. *Mol. Cell. Biol.* 27: 3780-3792.
- Brayman, M.J., et al. 2007. MUC1 expression is repressed by protein inhibitor of activated signal transducer and activator of transcription-γ. *Mol. Endocrinol.* 21: 2725-2737.

STORAGE

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

PROTOCOLS

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



Try **PIASy (C-11): sc-166706** or **PIASy (H-9): sc-376315**, our highly recommended monoclonal alternatives to PIASy (P-18).