

PIASy Polyclonal Antibody

Description

Product type	Primary Antibody
Code	BT-AP07159
Host	Rabbit
Isotype	IgG
Size	20ul, 50ul, 100ul
Immunogen	The antiserum was produced against synthesized peptide derived from human PIAS4. AA range:451-500
Mol wt	56504
Species reactivity	Human, Mouse
Clonality	Polyclonal
Recommended application	WB, IHC-p, ELISA
Concentration	1 mg/ml
Full name	PIASy Antibody
Synonyms	PIAS4; PIASG; E3 SUMO-protein ligase PIAS4; PIASy; Protein inhibitor of activated STAT protein 4; Protein inhibitor of activated STAT protein gamma; PIAS-gamma

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

The protein inhibitor of activated Stat (PIAS) proteins, which include PIAS1, PIAS3, PIASx, and PIASy, were originally characterized based on their interaction with the Stat family of transcription factors. PIAS1, PIAS3, and PIASx interact with and repress Stat1, Stat3, and Stat4, respectively. Deletion of PIAS1 leads to inhibition of interferon-inducible genes and increased protection against infection. The PIAS family contains a conserved RING domain that has been linked to a function as a small ubiquitin-related modifier (SUMO) ligase, coupling the SUMO conjugating enzyme Ubc9 with its substrate proteins. Numerous studies have now shown that PIAS family members can regulate the activity of transcription factors through distinct mechanisms, including NF- κ B, c-Jun, p53, Oct-4, and Smads. The activity of PIAS1 is regulated by both phosphorylation and arginine methylation. Inflammatory stimuli can induce IKK-mediated phosphorylation of PIAS1 at Ser90, which is required for its activity. In addition, PRMT1 induces arginine methylation of PIAS1 at Arg303 following interferon treatment and is associated with its repressive activity on Stat1. PIAS4, also known as PIASy, is a specific SUMO-E3 ligase for Ets-1 and represses Ets-1 dependent transcription. PIAS4 also alters the nuclear localization, reduces the transcriptional activity of C/EBP δ , and enhances cell proliferation and migration.

Recommended Dilution

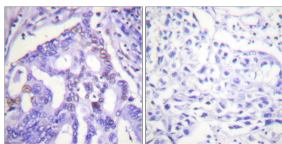
WB: 1: 500 - 1: 2000

IHC: 1: 100 - 1: 300

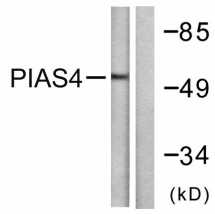
ELISA: 1: 20000

Not yet tested in other applications.

Images



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using PIAS4 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, using PIAS4 Antibody. The lane on the right is blocked with the synthesized peptide.

Storage

-20°C for one year

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