

Anti-PIAS3 Antibody

Rabbit polyclonal antibody to PIAS3 Catalog # AP59797

Product Information

Application WB, IHC
Primary Accession Q9Y6X2
Other Accession 054714

Reactivity Human, Mouse, Rat, Pig, Bovine, Drosophila

Host Rabbit
Clonality Polyclonal
Calculated MW 68017

Additional Information

Gene ID 10401

Other Names E3 SUMO-protein ligase PIAS3; Protein inhibitor of activated STAT protein 3

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the

N-term region of human PIAS3. The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC

(1/100 - 1/200)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name PIAS3

Function Functions as an E3-type small ubiquitin-like modifier (SUMO) ligase,

stabilizing the interaction between UBE2I and the substrate, and as a SUMO-tethering factor. Plays a crucial role as a transcriptional coregulation in various cellular pathways, including the STAT pathway and the steroid hormone signaling pathway. Involved in regulating STAT3 signaling via inhibiting STAT3 DNA-binding and suppressing cell growth. Enhances the sumoylation of MTA1 and may participate in its paralog-selective sumoylation (PubMed:21965678, PubMed:9388184). Sumoylates CCAR2 which promotes its interaction with SIRT1 (PubMed:25406032). Diminishes the sumoylation of ZFHX3 by preventing the colocalization of ZFHX3 with SUMO1 in the nucleus (PubMed:24651376).

Cytoplasm {ECO:0000250 | UniProtKB:O54714}. Nucleus

Cellular Location {ECO:0000250 | UniProtKB:O54714}. Nucleus speckle

{ECO:0000250|UniProtKB:O54714}. Note=Colocalizes with MITF in the nucleus. Colocalizes with GFI1 in nuclear dots. Colocalizes with SUMO1 in

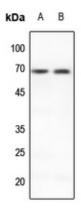
nuclear granules. {ECO:0000250 | UniProtKB:O54714}

Tissue Location Widely expressed..

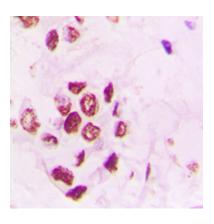
Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human PIAS3. The exact sequence is proprietary.

Images



Western blot analysis of PIAS3 expression in rat lung (A), rat spleen (B) whole cell lysates.



Immunohistochemical analysis of PIAS3 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.