



PIASy rabbit pAb

Cat#: orb769415 (Manual)

For research use only. Not intended for diagnostic use.

Product Name PIASy rabbit pAb

Host species Rabbit

Applications WB;IHC;IF;ELISA

Species Cross-Reactivity Human; Mouse

Recommended dilutions Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA:

1/20000. Not yet tested in other applications.

Immunogen The antiserum was produced against synthesized peptide derived from

human PIAS4. AA range:451-500

Specificity PIASy Polyclonal Antibody detects endogenous levels of PIASy protein.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium

azide..

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name E3 SUMO-protein ligase PIAS4

Gene Name PIAS4

Cellular localization Nucleus, PML body . Colocalizes with SUMO1 and TCF7L2/TCF4 and

LEF1 in a subset of PML (promyelocytic leukemia) nuclear bodies. .

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Clonality Polyclonal





Concentration 1 mg/ml

Observed band 56kD

Human Gene ID 51588

Human Swiss-Prot Number Q8N2W9

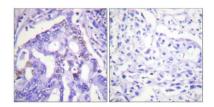
Alternative Names PIAS4; PIASG; E3 SUMO-protein ligase PIAS4; PIASy; Protein inhibitor of

activated STAT protein 4; Protein inhibitor of activated STAT protein

gamma; PIAS-gamma

Background

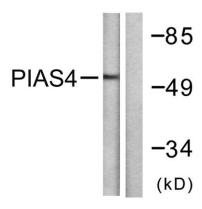
domain:The LXXLL motif is a coregulator signature that is essential for transcriptional corepression., function:Functions as an E3-type small ubiquitin-like modifier (SUMO) ligase, stabilizing the interaction between UBE2I and the substrate, and as a SUMO-tethering factor. Plays a crucial role as a transcriptional coregulation in various cellular pathways, including the STAT pathway, the p53 pathway, the Wnt pathway and the steroid hormone signaling pathway. Involved in gene silencing. Promotes PARK7 sumoylation. In Wnt signaling, represses LEF1 and enhances TCF4 transcriptional activities through promoting their sumoylations.,pathway:Protein modification; protein sumoylation.,PTM:Sumoylated. Lys-35 is the main site of sumoylation. Sumoylation is required for TCF4 sumoylation and transcriptional activitation. Represses LEF1 transcriptional activity. SUMO1 is the preferred conjugate.,similarity:Belongs to the PIAS family.,similarity:Contains 1 SAP domain.,similarity:Contains 1 SP-RING-type zinc finger.,subcellular location:Colocalizes with SUMO1 and TCF7L2/TCF4 and LEF1 in a subset of PML (promyelocytic leukemia) nuclear bodies.,subunit:Interacts with AR, GATA2, LEF1, TP53 and STAT1 (IFNG-induced). Binds to AT-rich DNA sequences, known as matrix or scaffold attachment regions (MARs/SARs) (By similarity). Interacts with TICAM1. Interacts with KLF8; the interaction results in SUMO ligation and repression of KLF8 transcriptional activity and of its cell cycle progression into G(1) phase.,tissue specificity:Highly expressed in testis and, at lower levels, in spleen, prostate, ovary, colon and peripheral blood leukocytes.,



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.