G-Biosciences Image not found or type unknown

Immunotag™ PIASx Polyclonal Antibody

Antibody Specification

Catalog No.	ITT3719
Product Description	Immunotag™ PIASx Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PIASx
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat,Monkey
Host Species	Rabbit
Immunogen	Synthesized peptide derived from PIASx, at AA range: 10-90
Specificity	PIASx Polyclonal Antibody detects endogenous levels of PIASx protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	PIAS2
Accession No.	O75928 Q8C5D8 Q6AZ28
Alternate Names	PIAS2; PIASX; E3 SUMO-protein ligase PIAS2; Androgen receptor-interacting protein 3; ARIP3; DAB2-interacting protein; DIP; Msx-interacting zinc finger protein; Miz1; PIAS-NY protein; Protein inhibitor of activated STAT x; Protein inhibitor

Antibody Specification

Description	protein inhibitor of activated STAT 2(PIAS2) Homo sapiens This gene encodes a member of the protein inhibitor of activated STAT (PIAS) family. PIAS proteins function as SUMO E3 ligases and play important roles in many cellular processes by mediating the sumoylation of target proteins. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. Isoforms of the encoded protein enhance the sumoylation of specific target proteins including the p53 tumor suppressor protein, c-Jun, and the androgen receptor. A pseudogene of this gene is located on the short arm of chromosome 4. The symbol MIZ1 has also been associated with ZBTB17 which is a different gene located on chromosome 1. [provided by RefSeq, Aug 2011],
Cell Pathway/ Category	Ubiquitin mediated proteolysis,Jak_STAT,Pathways in cancer,Small cell lung cancer,
Protein Expression	B-cell,Brain,Testis,
Subcellular Localization	nucleus,nucleoplasm,PML body,nuclear speck,
Protein Function	developmental stage:Expression of isoform 3 in adult testis is 14.2-fold stronger than in embryonic testis.,domain:The LXXLL motif is a transcriptional coregulator signature.,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 coregulator in various cellular pathways, including the STAT pathway, the p53 pathway and the steroid hormone signaling pathway. The effects of this transcriptional coregulation, transactivation or silencing may vary depending upon the biological context and the PIAS2 isoform studied. However, it seems to be mostly involved in gene silencing. Binds to sumoylated ELK1 and enhances its transcriptional activity by preventing recruitment of HDAC2 by ELK1, thus reversing SUMO-mediated repression of ELK1 transactivation activity. Isoform PIAS2-beta, but not isoform PIAS2-alpha, promotes MDM2 sumoylation. Isoform PIAS2-alpha promotes PARK7 sumoylation. Isoform PIAS2-beta promotes NCOA2 sumoylation more efficiently than isoform PIAS2-alpha.,induction:Up-regulated transiently during myeloid differentiation in various cells lines, such as HL-60, U-937, K-562, induced by either phorbol ester (TPA) or retinoic acid.,pathway:Protein modification; protein sumoylation.,PTM:Sumoylated.,similarity:Belongs to the PIAS family.,similarity:Contains 1 SAP domain.,similarity:Contains 1 SP-RING-type zinc finger.,subcellular location:Colocalizes at least partially with promyelocytic leukemia nuclear bodies (PML NBs).,subunit:Binds SUMO1 and UBE2I. Interacts with JUN, MDM2, PARK7, TP53 and TP73 isoform alpha, but not TP73 isoform beta. Interacts with STAT4 following IL12 and IFN-alpha stimulation of T-cells. Interacts also with GTF2I, GTF2IRD1, DAB2 and MSX2, as well as with several steroid receptors, including ESR1, ESR2, NR3C1, PGR, AR, and with NCOA2 (By similarity). Sumoylation of a target protein seems to enhance the interaction. Binds to sumoylated ELK1. Binds DNA, such as CDKN1A promoter, in a sequence-specific manner. Interacts with PLAG1. 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:Mainly testis. Isoform 3 is expressed predominantly in adult testis, weakly in pancreas, embryonic testis and sperm, and at very low levels in other organs.,
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