

Product datasheet

Anti-PIAS2 antibody ab244538

3 Images

Overview

Product name	Anti-PIAS2 antibody
Description	Rabbit polyclonal to PIAS2
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse 
Immunogen	Recombinant fragment corresponding to Human PIAS2 aa 581-621. Sequence: TSVTTTSSHESSTHVSSSSSRSETGVITSSGSGSNIPDIISLD Database link: O75928 <div style="display: flex; justify-content: space-around; margin-top: 10px;">  Run BLAST with  Run BLAST with </div>
Positive control	IHC-P: Human testis tissue. ICC/IF: U-2 OS cells.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab244538** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

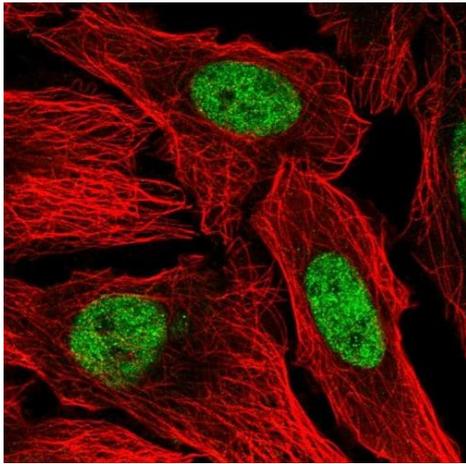
Application	Abreviews	Notes
ICC/IF		Use a concentration of 0.25 - 2 µg/ml. Fixation/Permeabilization: PFA/Triton X-100.
IHC-P		1/1000 - 1/2500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

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. Isoform PIAS2-alpha sumoylates PML at 'Lys-65' and 'Lys-160'.
Tissue specificity	Mainly expressed in testis. Isoform 3 is expressed predominantly in adult testis, weakly in pancreas, embryonic testis and sperm, and at very low levels in other organs.
Pathway	Protein modification; protein sumoylation.
Sequence similarities	Belongs to the PIAS family. Contains 1 PINIT domain. Contains 1 SAP domain. Contains 1 SP-RING-type zinc finger.

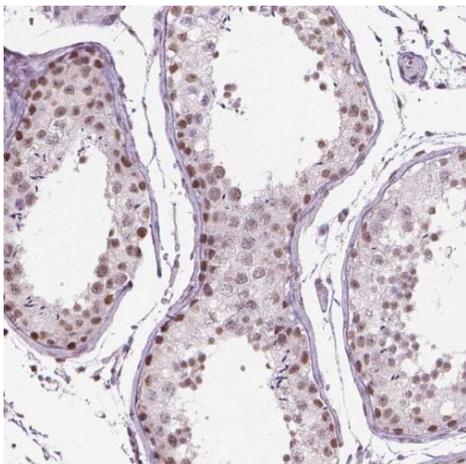
Developmental stage	Isoform 3 expression in adult testis is 14.2-fold stronger than in embryonic testis.
Domain	The LXXLL motif is a transcriptional coregulator signature.
Post-translational modifications	Sumoylated.
Cellular localization	Nucleus speckle. Nucleus, PML body. Nucleus. Colocalizes at least partially with promyelocytic leukemia nuclear bodies (PML NBs) (PubMed:22406621). Colocalizes with SUMO1 in nuclear granules (By similarity).

Images



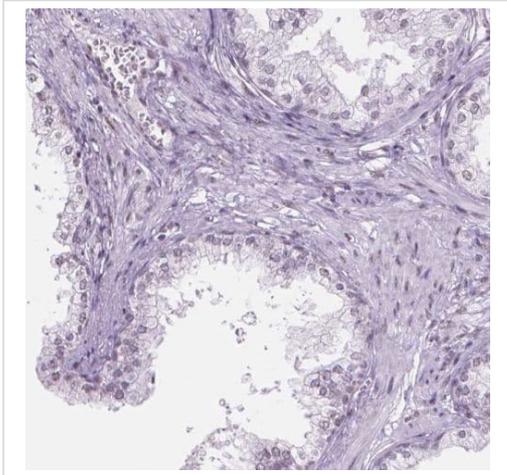
Immunocytochemistry/ Immunofluorescence - Anti-PIAS2 antibody (ab244538)

PFA-fixed, Triton X-100 permeabilized U-2 OS (human bone osteosarcoma epithelial cell line) cells stained for PIAS2 (green) using ab244538 at 4 µg/ml in ICC/IF.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PIAS2 antibody (ab244538)

Paraffin-embedded human testis tissue stained for PIAS2 using ab244538 at 1/1000 dilution in immunohistochemical analysis.



Paraffin-embedded human prostate tissue stained for PIAS2 using ab244538 at 1/1000 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PIAS2 antibody (ab244538)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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