## abcam

## Product datasheet

## Anti-PIAS2 antibody [EPR2582(2)] abl26601

## Recombinant RabMAb

2 References 2 Images

| Overview |  |
| :--- | :--- |
| Product name | Anti-PIAS2 antibody [EPR2582(2)] |
| Description | Rabbit monoclonal [EPR2582(2)] to PIAS2 |
| Host species | Rabbit |
| Tested applications | Uuitable for: WB |
| Unsuitable for: Flow Cyt,IHC-P or IP |  |
| Species reactivity | Reacts with: Human |
|  | Predicted to work with: Mouse, Rat |
| Immunogen | Synthetic peptide within Human PIAS2 aa 100-200. The exact sequence is proprietary. |
| Positive control | HepG2 whole cell lysate (ab7900); Human fetal kidney tissue lysate. |
| General notes | This product is a recombinant monoclonal antibody, which offers several advantages including: |
|  | - High batch-to-batch consistency and reproducibility |
|  | - Improved sensitivity and specificity |
|  | - Long-term security of supply |
|  | - Animal-free production |
|  | For more information see here. |
|  | Our RabMAb ${ }^{\circledR}$ technology is a patented hybridoma-based technology for making rabbit |
| monoclonal antibodies. For details on our patents, please refer to RabMAb ${ }^{\text {® }}$ patents. |  |

Properties

| Form | Liquid |
| :--- | :--- |
| Storage instructions | Shipped at $4^{\circ} \mathrm{C}$. Store at $-20^{\circ} \mathrm{C}$. Stable for 12 months at $-20^{\circ} \mathrm{C}$. |
| Storage buffer | $\mathrm{pH}: 7.20$ |
|  | Preservative: $0.01 \%$ Sodium azide |
|  | Constituents: $9 \%$ PBS, $40 \%$ Glycerol (glycerin, glycerine), $0.05 \%$ BSA, $50 \%$ Tissue culture |
|  | supernatant |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR2582(2) |

## Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab126601 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 |
| :---: | :---: | :---: |
| WB |  | $1 / 1000-1 / 10000$. Detects a band of approximately 63 kDa (predicted molecular weight: 68 kDa ). |
| Application notes | Is unsuitable for Flow Cyt,IHC-P or IP. |  |
| 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 'Lys160'. |  |
| 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. <br> Contains 1 PINIT domain. <br> Contains 1 SAP domain. <br> 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



Western blot - Anti-PIAS2 antibody [EPR2582(2)]
(ab126601)


All lanes : Anti-PIAS2 antibody [EPR2582(2)] (ab126601) at 1/1000 dilution

Lane 1 : HepG2 cell lysate
Lane 2 : Human fetal kidney tissue lysate

Lysates/proteins at $10 \mu \mathrm{~g}$ per lane.

## Secondary

All lanes : Goat anti-Rabbit HRP at 1/2000 dilution

Predicted band size: 68 kDa

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

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