abcam

Product datasheet

Anti-PIAS2 antibody [EPR2582(2)] ab126601

Recombinant RabMAb

2 References 2 Images

Overview

Product name Anti-PIAS2 antibody [EPR2582(2)]

Description Rabbit monoclonal [EPR2582(2)] to PIAS2

Host species Rabbit

Suitable for: WB **Tested applications**

Unsuitable for: Flow Cyt, IHC-P or IP

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Synthetic peptide within Human PIAS2 aa 100-200. The exact sequence is proprietary. **Immunogen**

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® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer 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)

Isotype ΙgG

Applications

The Abpromise guarantee

Our Abpromise quarantee 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 '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.

Contains 1 SP-RING-type zinc finger.

Sequence similarities

Belongs to the PIAS family. Contains 1 PINIT domain. Contains 1 SAP domain.

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

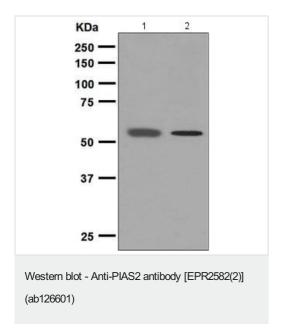
Sumoylated.

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



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

Lane 1: HepG2 cell lysate

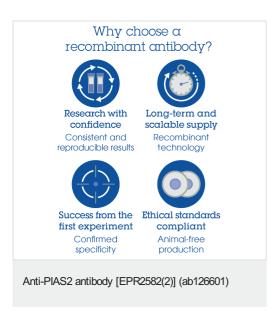
Lane 2: Human fetal kidney tissue lysate

Lysates/proteins at 10 µg 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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