# abcam

# Product datasheet

# Anti-PIDD1 antibody ab78389

3 References 2 Images

Overview

Product name Anti-PIDD1 antibody

**Description** Rabbit polyclonal to PIDD1

Host species Rabbit

**Specificity** Based on the immunogen information this product will recognise isoforms 1, 2, 3 and 4 of human

PIDD1. From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a

specific batch, please contact our Scientific Support who will be happy to help.

Tested applications Suitable for: ICC/IF, WB

Species reactivity Reacts with: Human

Predicted to work with: Monkey

**Immunogen** Synthetic peptide corresponding to Human PIDD1 aa 850 to the C-terminus (C terminal)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab87817)

**Positive control** This antibody gave a positive signal in human liver tissue lysate.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

**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 or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

## **Applications**

### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab78389 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 1 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 99.7 kDa (predicted molecular weight: 99.7 kDa).

#### **Target**

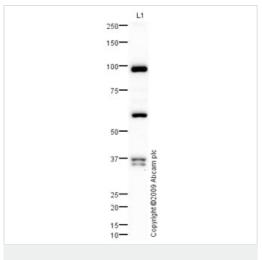
#### Relevance

The death domain (DD) containing protein PIDD is a p53 target gene in an erythroleukemia cell line that undergoes G1 phase arrest and subsequent apoptosis after p53 expression. Independently, PIDD was also described as a DD-containing protein with unknown function. The N-terminal region of PIDD contains seven leucine-rich repeats (LRRs), a protein interaction motif found in various proteins with diverse functions, followed by two ZU-5 domains and a C-terminal DD. PIDD forms a complex with caspase-2 and the adaptor protein RAIDD. Increased PIDD expression results in spontaneous activation of caspase-2 and sensitization to apoptosis by genotoxic stimuli, via interaction with caspase-2 and CRADD/RAIDD. PIDD also promotes apoptosis downstream of p53 as component of the DNA damage/stress response pathway that connects p53/TP53 to apoptosis. PIDD has also been shown to interact with NEMO/IKBKG and RIP1 and enhance sumoylation and ubiquitination of NEMO/IKBKG, an important component for activation of the transcription factor NF-kappa-B.

#### Cellular localization

Cytoplasm. Nucleus.

#### **Images**



Western blot - Anti-PIDD1 antibody (ab78389)

Anti-PIDD1 antibody (ab78389) at 1  $\mu$ g/ml + Human liver tissue lysate - total protein (ab29889) at 10  $\mu$ g

# **Secondary**

Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

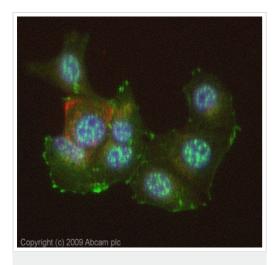
Performed under reducing conditions.

**Predicted band size:** 99.7 kDa **Observed band size:** 99 kDa

**Additional bands at:** 33 kDa (possible non-specific binding), 37 kDa (possible non-specific binding), 66 kDa (possible isoform)

Exposure time: 3 minutes

PIDD1 has seven different isoforms (SwissProt) which all have differing molecular weights. The image shows the primary target (Isoform 1) at 99 kDa as well as isoform 4 (66 kDa).



Immunocytochemistry/ Immunofluorescence - Anti-PIDD1 antibody (ab78389)

ICC/IF image of ab78389 stained MCF-7 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal Goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab78389, 1 $\mu$ g/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 Goat anti-Rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 $\mu$ M. This antibody also gave a positive result in 4% PFA fixed (10 min) HeLa, HEK293, HepG2 cells at 1 $\mu$ g/ml, and in 100% Methanol fixed (5 min) HepG2, and MCF-7 cells at 1 $\mu$ g/ml.

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

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