

## **LRDD Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58690

### **Specification**

**Physical State** 

**Epitope Specificity** 

## **LRDD Polyclonal Antibody - Product Information**

Application IHC-P, IHC-F, IF, E

Primary Accession
Reactivity
Rost
Clonality
Calculated MW
Rost
Robbit
Polyclonal
100 KDa

Immunogen KLH conjugated synthetic peptide derived

Liquid

laG

from human LRDD/PIDD

551-650/910

Isotype

**Purity** affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm. Nucleus.

SIMILARITY Contains 1 death domain. Contains 7 LRR

(leucine-rich) repeats. Contains 1 peptidase S68 domain. Contains 2 ZU5

domains.

SUBUNIT Interacts with FADD and MAP-kinase

activating death domain/MADD. Forms a

complex with IKBKG and with

receptor-interacting serine-threonine kinase 1/RIP1. Forms also a complex

Important Note named PIDDosome with CASP2 and CRADD.

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

## **Background Descriptions**

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.



## **LRDD Polyclonal Antibody - Additional Information**

Gene ID 55367

#### **Other Names**

p53-induced death domain-containing protein 1, 3.4.21.-, Leucine-rich repeat and death domain-containing protein, PIDD-N, PIDD-C, PIDD-CC, PIDD1 {ECO:0000303|PubMed:28397838, ECO:0000312|HGNC:HGNC:16491}

# Target/Specificity

Ubiquitous.

#### **Dilution**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution\_IF">IF~~1:50~200</span><br \> <span class ="dilution\_E">E~~N/A</span>

#### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **LRDD Polyclonal Antibody - Protein Information**

Name PIDD1 {ECO:0000303|PubMed:28397838, ECO:0000312|HGNC:HGNC:16491}

#### **Function**

Component of the DNA damage/stress response pathway that functions downstream of p53/TP53 and can either promote cell survival or apoptosis (PubMed:<a

href="http://www.uniprot.org/citations/10973264" target="\_blank">10973264</a>, PubMed:<a href="http://www.uniprot.org/citations/15073321" target="\_blank">15073321</a>, PubMed:<a href="http://www.uniprot.org/citations/16360037" target="\_blank">16360037</a>, PubMed:<a href="http://www.uniprot.org/citations/17159900" target="\_blank">17159900</a>). Associated with CRADD and the CASP2 caspase, it forms the PIDDosome a complex that activates CASP2 and triggers apoptosis (PubMed:<a href="http://www.uniprot.org/citations/15073321" target="\_blank">15073321</a>, PubMed:<a href="http://www.uniprot.org/citations/17159900"

target="\_blank">17159900</a>). Associated with IKBKG and RIPK1, it enhances sumoylation and ubiquitination of IKBKG which is important for activation of the transcription factor NF-kappa-B (PubMed:<a href="http://www.uniprot.org/citations/16360037" target="\_blank">16360037</a>, PubMed:<a href="http://www.uniprot.org/citations/17159900" target="\_blank">17159900</a>).

## **Cellular Location**

Cytoplasm. Nucleus Note=Enriched in the nucleus upon DNA damage

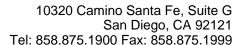
#### **Tissue Location**

Ubiquitous...

#### **LRDD Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

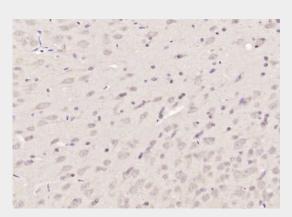
- Western Blot
- Blocking Peptides
- Dot Blot





- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **LRDD Polyclonal Antibody - Images**



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (LRDD) Polyclonal Antibody, Unconjugated (bs-7615R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.