### For Research Use Only

# IRE1; ERN1 Polyclonal antibody

Catalog Number: 27528-1-AP 95 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

27528-1-AP BC 130405 GeneID (NCBI): Size: 150ul, Concentration: 500 ug/ml by 2081

Nanodrop: **UNIPROT ID:** 075460

Full Name: Isotype: endoplasmic reticulum to nucleus

IgG signaling 1 Immunogen Catalog Number: Calculated MW: 977 aa, 110 kDa AG25580

> Observed MW: 130 kDa

**Purification Method:** Antigen affinity purification Recommended Dilutions:

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500

WB 1:1000-1:6000

**Applications** 

**Tested Applications:** 

WB, IHC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF

Rabbit

Species Specificity:

human **Cited Species:** 

human, rat, bovine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: A549 cells, LNCaP cells, PC-3 cells

IP: A549 cells,

IHC: human pancreas cancer tissue,

## **Background Information**

Inositol-requiring enzyme 1 (IRE1) is an ER transmembrane sensor that activates the UPR to maintain the ER and cellular function. Although mammalian IRE1 promotes cell survival, it can initiate apoptosis via decay of antiapoptotic miRNAs. IRE1 contains a ribonuclease domain in its cytoplasmic region which initiates splicing reaction by direct cleavage of XBP1 mRNA at the two stem loop structures. IRE1 plays instrumental protumoral roles in several cancers, and high IRE1 activity has been associated with poorer prognoses. (PMID: 23880584, PMID: 32861679. PMID: 31875595)

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Tongtong Liu	34530836	J Neuroinflammation	WB
Lin Zhang	32963696	Oxid Med Cell Longev	WB
Zixiu Liu	34539417	Front Pharmacol	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

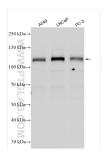
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

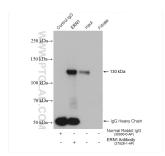
E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

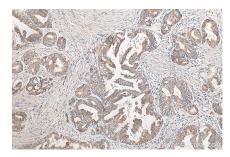
## **Selected Validation Data**



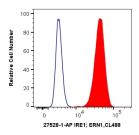
Various lysates were subjected to SDS PAGE followed by western blot with 27528-1-AP (IRE1; ERN1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



IP result of anti-IRE1; ERN1 (IP:27528-1-AP, 4ug; Detection:27528-1-AP 1:500) with A549 cells lysate 600 ug.



Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 27528-1-AP (IRE1; ERN1 antibody) at dilution of 1:200 (under 10x lens).



1X10^6 A549 cells were intracellularly stained with 0.4 ug Anti-Human | RE1; ERN1 (27528-1-AP) and Coralite® 488-Conjugated Goat Anti-Rabbit | gG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).