

For Research Use Only

IRE1; ERN1 Polyclonal antibody

Catalog Number: 27528-1-AP

115 Publications



Basic Information

Catalog Number:

27528-1-AP

Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG25580

GenBank Accession Number:

BC130405

GeneID (NCBI):

2081

UNIPROT ID:

O75460

Full Name:

endoplasmic reticulum to nucleus signaling 1

Calculated MW:

977 aa, 110 kDa

Observed MW:

130 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:6000

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

IHC 1:50-1:500

Applications

Tested Applications:

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

Cited Applications:

WB, IHC, IF, CoIP

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.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

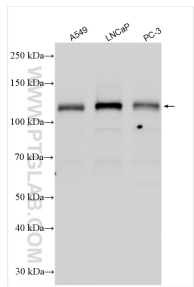
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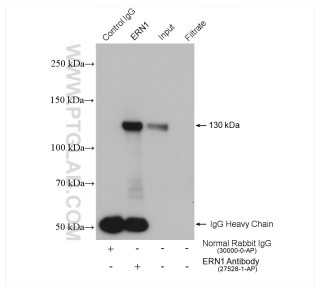
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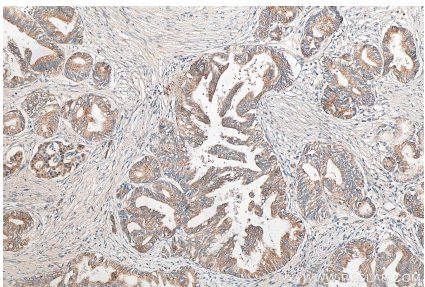
Selected Validation Data



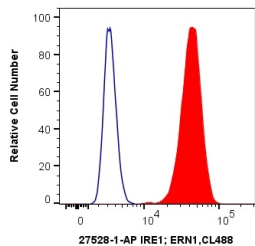
Various lysates were subjected to SDS PAGE followed by western blot with 27528-1-AP (IRE1; ERN1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



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



1X10⁶ A549 cells were intracellularly stained with 0.4 ug Anti-Human IRE1; ERN1 (27528-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(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).