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Datasheet for ABIN500050
anti-ERN1 antibody (N-Term)

2 Images

Overview

| | |
|----------------------|--|
| Quantity: | 0.1 mg |
| Target: | ERN1 |
| Binding Specificity: | N-Term |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This ERN1 antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunofluorescence (IF), Enzyme Immunoassay (EIA) |

Product Details

| | |
|---------------|--|
| Immunogen: | Human IRE1p (N-Terminus) Peptide |
| Isotype: | IgG |
| Specificity: | IRE1p antibody was raised against a 15 amino acid peptide from near the amino terminus of human IRE1p. |
| Purification: | Affinity chromatography purified via peptide column |

Target Details

| | |
|-------------------|---|
| Target: | ERN1 |
| Alternative Name: | ERN1 / IRE1 (ERN1 Products) |
| Background: | Accumulation of malformed proteins in the endoplasmic reticulum (ER) activates the unfolded |

Target Details

protein response (UPR) and the upregulation of the ER molecular chaperones GRP78 and GRP 94 (1,2). These proteins are normally bound to ER transmembrane proteins such as IRE1p and ATF6 (3,4) but ER stress causes their dissociation. This allows IRE1p, a serine-threonine protein kinase to transduce the unfolded protein signal from the ER to the nucleus. IRE1p also has an endoribonuclease activity that is required to splice X-box binding protein (XBP1) mRNA converting it to a potent UPR transcriptional activation (5). Depletion of IRE1p through the expression of a dominant negative form of IRE1p has no effect on transfected cells, but cell death via apoptosis occurs under stress conditions that cause unfolded proteins to accumulate in the ER (6). Two alternatively spliced transcript variants encoding different isoforms have been found for this gene. Synonyms: Endoplasmic reticulum-to-nucleus signaling 1, IRE1a, IRE1p, Inositol-requiring protein 1, Ire1-alpha, Serine/threonine-protein kinase/endoribonuclease IRE1

Gene ID: 2081

UniProt: [O75460](#)

Pathways: [ER-Nucleus Signaling](#), [Unfolded Protein Response](#)

Application Details

Application Notes: ELISA. Western Blot: 1 - 2 µg/mL. Immunocytochemistry.
Other applications not tested.
Optimal dilutions are dependent on conditions and should be determined by the user.

Restrictions: For Research Use only

Handling

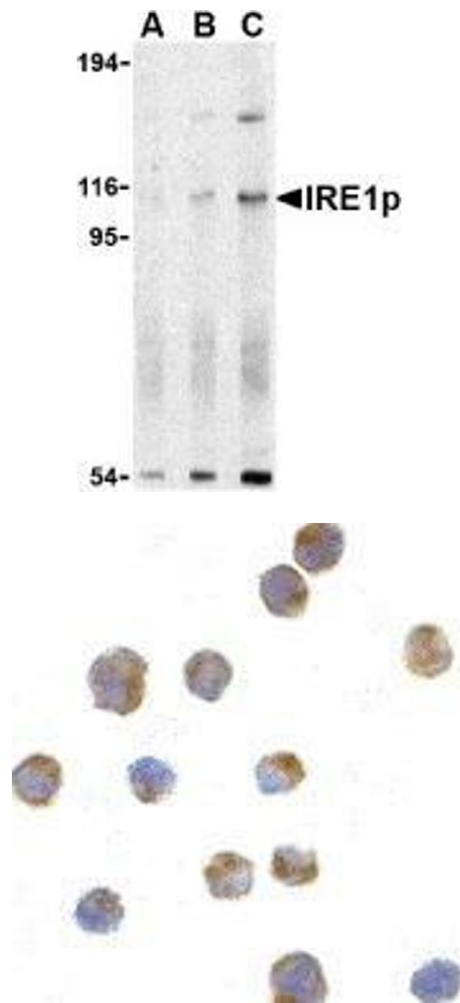
Buffer: PBS containing 0.02 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C

Storage Comment: Store the antibody undiluted at 2-8 °C.



Western Blotting

Image 1. Western blot analysis of IRE1p in A-20 cell lysate with AP30445PU-N IRE1p antibody at (A) 0.5, (B) 1 and (C) 2 $\mu\text{g/ml}$.

Immunofluorescence

Image 2. Immunocytochemistry of IRE1p in A20 cells with AP30445PU-N IRE1p antibody at 1 $\mu\text{g/ml}$.