

Product datasheet

Anti-IRE1 antibody [9F2] ab96481

★★★★★ [6 Abreviews](#) [9 References](#) [3 Images](#)

Overview

Product name	Anti-IRE1 antibody [9F2]
Description	Mouse monoclonal [9F2] to IRE1
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Purified recombinant fragment of Human IRE1 (aa282-433) expressed in <i>E.coli</i> .
Positive control	Raji, A431, Jurkat, Hela and HEK293 cell lysate; Human brain and stomach tissue.
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Protein G purified
Purification notes	Purified from tissue culture supernatant.
Clonality	Monoclonal
Clone number	9F2
Isotype	IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab96481 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
WB	★★★★☆ (3)	1/500 - 1/2000. Predicted molecular weight: 110 kDa.
IHC-P	★★★★★ (1)	1/200 - 1/1000.
Flow Cyt		1/100 - 1/400. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function

Senses unfolded proteins in the lumen of the endoplasmic reticulum via its N-terminal domain which leads to enzyme auto-activation. The active endoribonuclease domain splices XBP1 mRNA to generate a new C-terminus, converting it into a potent unfolded-protein response transcriptional activator and triggering growth arrest and apoptosis.

Tissue specificity

Ubiquitously expressed. High levels observed in pancreatic tissue.

Sequence similarities

Belongs to the protein kinase superfamily. Ser/Thr protein kinase family.
Contains 1 KEN domain.
Contains 1 protein kinase domain.

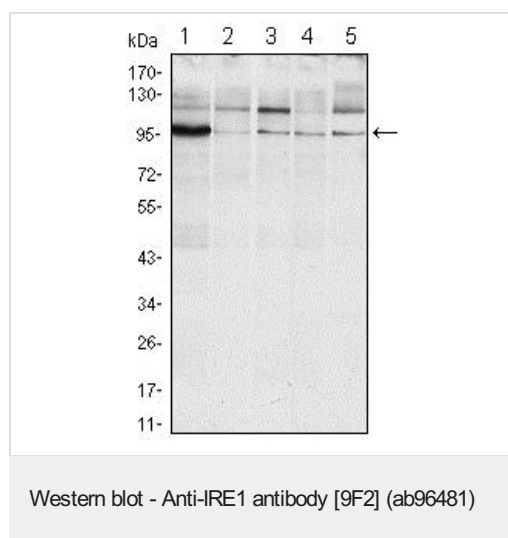
Post-translational modifications

Autophosphorylated.

Cellular localization

Endoplasmic reticulum membrane.

Images



All lanes : Anti-IRE1 antibody [9F2] (ab96481) at 1/500 dilution

Lane 1 : Raji cell lysate

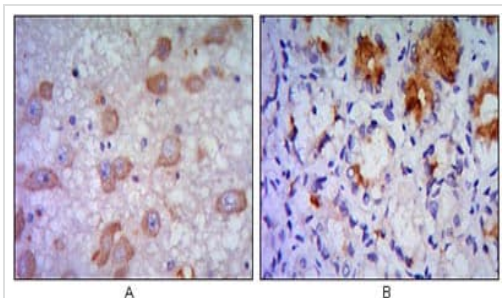
Lane 2 : A431 cell lysate

Lane 3 : Jurkat cell lysate

Lane 4 : HeLa cell lysate

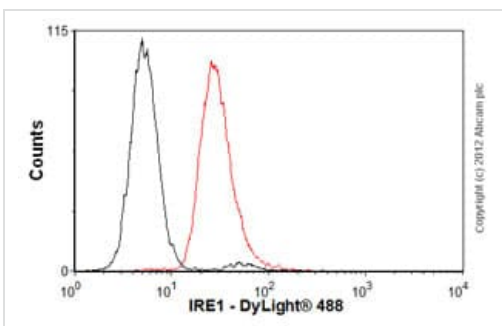
Lane 5 : HEK293 cell lysate

Predicted band size: 110 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRE1 antibody [9F2] (ab96481)

Immunohistochemical analysis of paraffin-embedded Human brain tissue (A) and stomach tissue (B), showing cytoplasmic localization using ab96481 at 1/200 dilution with DAB staining.



Flow Cytometry - Anti-IRE1 antibody [9F2] (ab96481)

Overlay histogram showing Raji cells stained with ab96481 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab96481, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Raji cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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

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