abcam

Product datasheet

Anti-IRE1 (phospho S724) antibody [EPR5253] ab124945

Recombinant RabMAb

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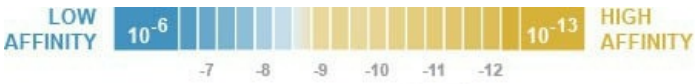
Overview

Product name	Anti-IRE1 (phospho S724) antibody [EPR5253]
Description	Rabbit monoclonal [EPR5253] to IRE1 (phospho S724)
Host species	Rabbit
Tested applications	**Suitable for:** WB, Dot blot **Unsuitable for:** Flow Cyt,ICC/IF or IHC-P
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human IRE1 aa 700-800 (phospho S724). The exact sequence is proprietary. Database link: **O75460**
Positive control	WB: Thapsigargin treated HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate, DTT treated HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K_D = 1.10 x 10^{-10} M



Learn more about K_D

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5253
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab124945 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

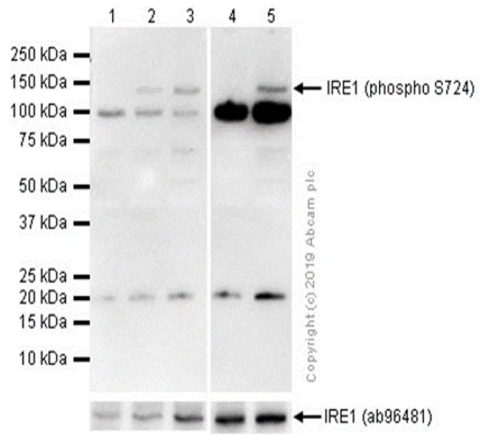
Application	Abreviews	Notes
WB	★★★★☆ (5)	1/200 - 1/10000. Predicted molecular weight: 110 kDa.
Dot blot		1/1000.

Application notes Is unsuitable for Flow Cyt,ICC/IF or IHC-P.

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



Western blot - Anti-IRE1 (phospho S724) antibody [EPR5253] (ab124945)

All lanes : Anti-IRE1 (phospho S724) antibody [EPR5253] (ab124945) at 1/200 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2 : HeLa (Human cervix adenocarcinoma epithelial cell) treated with 1uM Thapsigargin for 1 hour whole cell lysates
Lane 3 : HeLa (Human cervix adenocarcinoma epithelial cell) treated with 1uM Thapsigargin for 6 hours whole cell lysates
Lane 4 : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysates
Lane 5 : HEK-293 (Human embryonic kidney epithelial cell) treated with 10mM DTT for 1 hour whole cell lysates

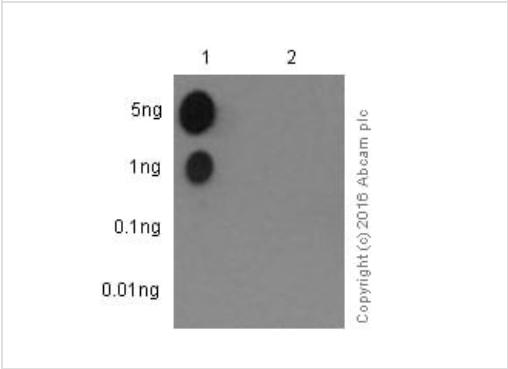
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 110 kDa
Observed band size: 110 kDa

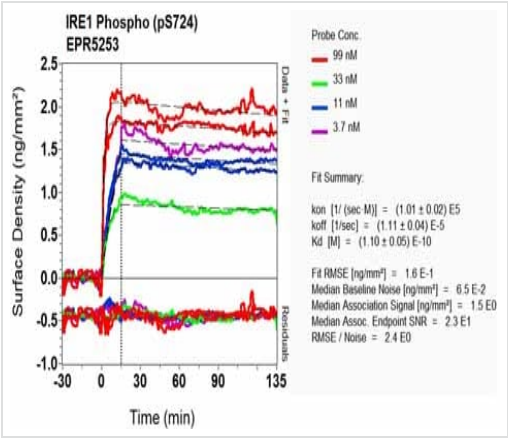
Exposure time: 180 seconds

Blocking/Diluting buffer and concentration: 5% NFDM/TBST.



Dot Blot - Anti-IRE1 (phospho S724) antibody [EPR5253] (ab124945)

Dot Blot analysis of Lane 1: IRE1 (pS724) phospho peptide and Lane 2: IRE1 non-phospho peptide labeling IRE1 (phospho S724) with ab124945 at 1/1000 dilution. 5% NFDM/TBST was used as the diluting and blocking buffer. **ab97051** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated was used as the secondary antibody at 1/100000 dilution. Exposure time: 3 minutes.



OI-RD Scanning - Anti-IRE1 (phospho S724) antibody [EPR5253] (ab124945)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

Anti-IRE1 (phospho S724) antibody [EPR5253] (ab124945)

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