🕜 Tel: +1-301-363-4651 🛛 🖂 Email: cusabio@cusabio.com 🌔 Website: www.cusabio.com 🌘

Phospho-ERN1 (S724) Recombinant Monoclonal Antibody

Product Code	CSB-RA007795A724phHU	
Abbreviation	Serine/threonine-protein kinase/endoribonuclease IRE1	
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.	
Uniprot No.	O75460	
Immunogen	A synthesized peptide derived from Human Phospho-ERN1 (S724)	
Species Reactivity	Human	
Tested Applications	ELISA, WB, IF; Recommended dilution: WB:1:500-1:5000, IF:1:20-1:200	
Relevance	Senses unfolded proteins in the lumen of the endoplasmic reticulum via its N- terminal domain which leads to enzyme auto-activation (PubMed:9637683, PubMed:11175748, PubMed:12637535). 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 (PubMed:24508390).	
Form	Liquid	
Conjugate	Non-conjugated	
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.	
Purification Method	Affinity-chromatography	
Isotype	Rabbit IgG	
Clonality	Monoclonal	
Alias	Serine/threonine-protein kinase/endoribonuclease IRE1, Endoplasmic reticulum- to-nucleus signaling 1, hIRE1p, Ire1-alpha, IRE1a, Serine/threonine-protein kinase, Endoribonuclease, ERN1	
Immunogen Species	Homo sapiens (Human)	
Research Area	Signal Transduction	
Gene Names	ERN1	
Clone No.	1F12	
Image	$\begin{array}{c} \begin{array}{c} & & \\ & & \\ & & \\ 250 \text{KD} \rightarrow \end{array} \end{array} \xrightarrow{\gamma \beta^5} & \gamma \beta^5 & \gamma \beta^{16} & \gamma \beta^{16} & \gamma \beta^{16} & \gamma \beta^{16} \\ 130 \text{KD} \rightarrow \end{array}$	Western Blot Positive WB detected in: 293 whole cell lysate, A549 whole cell lysate. Hela whole cell lysate

Calyculin A 100nM/60min

Calyculin A 100nM/30min EGF 100ng/ml/20min

95KD

72KD

55KD -

36KD

(treated with Calyculin A or EGF)

All lanes: Phospho-ERN1 antibody at 0.75µg/ml Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 110 kDa Observed band size: 110 kDa

1



🕜 Tel: +1-301-363-4651 🛛 🖂 Email: cusabio@cusabio.com 🛛 🥑 Website: www.cusabio.com 🌘



Immunofluorescence staining of Hela cells with CSB-RA007795A724phHU at 1:100, counterstained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Description

Phospho-ERN1 (S724) recombinant monoclonal antibody was prepared by cloning the coding sequence for the phospho-ERN1 (S724) monoclonal antibody (produced by immunizing animals with the synthetic phosphopeptide of ERN1) into the plasmids and transfecting the clones into cell lines. It is a rabbit IgG purified through the affinity-chromatography method. This phospho-ERN1 (S724) antibody detects endogenous levels of human ERN1 only when phosphorylated at Ser724. It can be applied in ELISA, WB, and IF analyses.

Phosphorylation at Ser724 residue of the ERN1 protein can regulate its transcriptional and enzymatic activities. Phospho-ERN1 (S724) antibodies are used to analyze ERN1 Ser724 phosphorylation, which is a highly conserved site within the kinase activation domain.