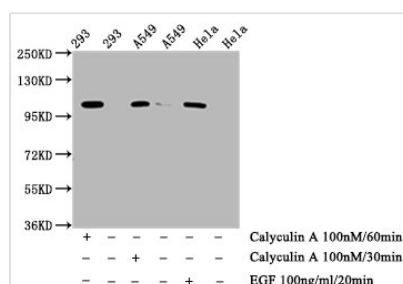




Phospho-ERN1 (S724) Recombinant Monoclonal Antibody

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



Western Blot

Positive WB detected in: 293 whole cell lysate, A549 whole cell lysate, HeLa whole cell lysate (treated with Calyculin A or EGF)

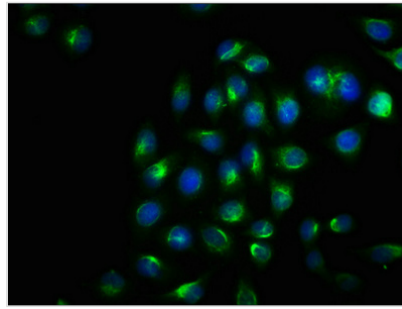
All lanes: Phospho-ERN1 antibody at 0.75µg/ml

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 110 kDa

Observed band size: 110 kDa



Immunofluorescence staining of HeLa cells with CSB-RA007795A724pH1U at 1:100, counter-stained 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-conjugated 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.