Datasheet for ABIN3020728

anti-ERK2 antibody (AA 200-300)

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Overview

Quantity:	100 µL
Target:	ERK2 (MAPK1)
Binding Specificity:	AA 200-300
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ERK2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	A synthetic peptide corresponding to a sequence within amino acids 200-300 of human ERK2 (NP_620407.1).
Sequence:	LNSKGYTKSI DIWSVGCILA EMLSNRPIFP GKHYLDQLNH ILGILGSPSQ EDLNCIINLK ARNYLLSLPH KNKVPWNRLF PNADSKALDL LDKMLTFNPH K
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Polyclonal Antibodies

Target Details

Target:	ERK2 (MAPK1)

Target Details

Alternative Name:	MAPK1 (MAPK1 Products)
Background:	This gene encodes a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. The activation of this kinase requires its phosphorylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. One study also suggests that this protein acts as a transcriptional repressor independent of its kinase activity. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Two alternatively spliced transcript variants encoding the same protein, but differing in the UTRs, have been reported for this gene.,ERK,ERK-2,ERK2,ERT1,MAPK2,P42MAPK,PRKM1,PRKM2,p38,p40,p41,p41mapk,p42-MAPK,MAPK1,Epigenetics & Nuclear Signaling,Translation Control,Regulation of eIF4 and p70 S6 Kinase,Signal Transduction,G protein signaling,G2/M DNA Damage Checkpoint,Kinase,Serine/threonine kinases,mTOR Signaling Pathway,ErbB-HER Signaling Pathway,MAPK-Erk Signaling Pathway,Cell Biology & Developmental Biology,Apoptosis,Mitochondrial Control of Apoptosis,Inhibition of Apoptosis,Cell Cycle,Centromere,Microtubules,TGF-b-Smad Signaling Pathway,ESC Pluripotency and Differentiation,Endocrine & Metabolism,Insulin Receptor Signaling Pathway,Warburg Effect,Immunology & Inflammation,B Cell Receptor Signaling Pathway,T Cell Receptor Signaling Pathway,IL-6 Receptor Signaling Pathway,Neuroscience,Neurodegenerative Diseases,Stem Cells,Cardiovascular,Angiogenesis,MAPK1
Molecular Weight:	36 kDa/41 kDa
Gene ID:	5594
UniProt:	P28482
Pathways:	MAPK Signaling, RTK Signaling, Apoptosis, Interferon-gamma Pathway, Fc-epsilon Receptor Signaling Pathway, Response to Growth Hormone Stimulus, Activation of Innate immune Response, Cellular Response to Molecule of Bacterial Origin, Hepatitis C, Protein targeting to Nucleus, Toll-Like Receptors Cascades, Monocarboxylic Acid Catabolic Process, Autophagy, G-protein mediated Events, Signaling Events mediated by VEGFR1 and VEGFR2, Signaling of Hepatocyte Growth Factor Receptor, VEGFR1 Specific Signals, BCR Signaling, S100 Proteins

Application Details

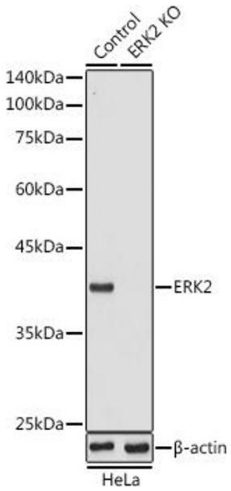
Application Notes:	WB,1:500 - 1:2000,IF,1:50 - 1:200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid freeze / thaw cycles
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

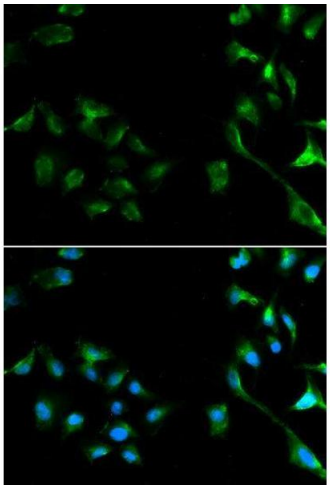
Publications

Product cited in:	Wu, Zhang, Qi, Zhang, Li, Li, Lin, Bai, Liu, Chen, Yang, Xu, Zhang, Yang: "Nicotine promotes atherosclerosis via ROS-NLRP3-mediated endothelial cell pyroptosis." in: **Cell death & disease**, Vol. 9, Issue 2, pp. 171, (2018) (PubMed). Du, Qiao, Chen, Chen, Liu, Lin, Wang, Xie: "Toll-Like Receptor 4 Mediates Methamphetamine-Induced Neuroinflammation through Caspase-11 Signaling Pathway in Astrocytes." in: **Frontiers in molecular neuroscience**, Vol. 10, pp. 409, (2017) (PubMed). There are more publications referencing this product on: Product page



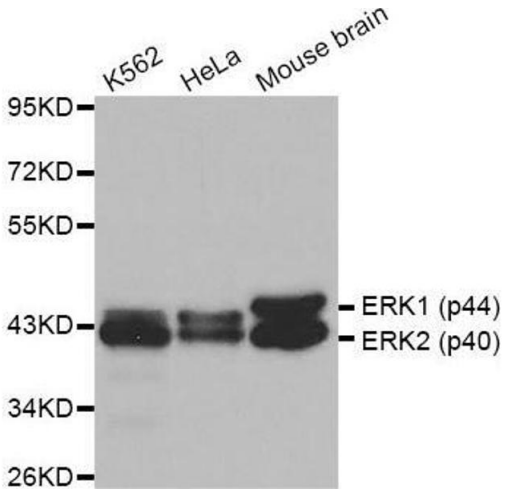
Western Blotting

Image 1. Western blot analysis of extracts from normal (control) and ERK2 knockout (KO) HeLa cells, using ERK2 antibody (ABIN3020727, ABIN3020728, ABIN3020729 and ABIN6213694) at 1:1000 dilution.Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution.Lysates/proteins: 25 µg per lane.Blocking buffer: 3 % nonfat dry milk in TBST.Detection: ECL Basic Kit (RM00020).Exposure time: 10s.



Immunofluorescence

Image 2. Immunofluorescence analysis of A549 cell using ERK1/2 antibody. Blue: DAPI for nuclear staining.



Western Blotting

Image 3. Western blot analysis of extracts of various cell lines, using ERK1/2 antibody.

Please check the product details page for more images. Overall 9 images are available for ABIN3020728.