

Datasheet for ABIN723734

anti-ERK1/2 antibody (AA 301-358) (HRP)[Go to Product page](#)**2** Publications

Overview

Quantity:	100 µL
Target:	ERK1/2 (MAPK1/3)
Binding Specificity:	AA 301-358
Reactivity:	Human, Mouse, Rat, Pig
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ERK1/2 antibody is conjugated to HRP
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from mouse ERK2
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Pig, Rat
Predicted Reactivity:	Dog,Cow,Horse,Chicken,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	ERK1/2 (MAPK1/3)
Alternative Name:	ERK1 + ERK2 (MAPK1/3 Products)

Target Details

Background:	Synonyms: Mitogen-activated protein kinase 1, MAP kinase 1, MAPK 1, ERT1, Extracellular signal-regulated kinase 2, ERK-2, MAP kinase isoform p42, p42-MAPK, Mitogen-activated protein kinase 2, MAP kinase 2, MAPK 2, Mapk1, Erk2, Mapk, Prkm1 Background: Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK1/ERK2 and MAPK3/ERK1 are the 2 MAPKs which play an important role in the MAPK/ERK cascade. They participate also in a signaling cascade initiated by activated KIT and KITLG/SCF. Depending on the cellular context, the MAPK/ERK cascade mediates diverse biological functions such as cell growth, adhesion, survival and differentiation through the regulation of transcription, translation, cytoskeletal rearrangements. The MAPK/ERK cascade plays also a role in initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors. About 160 substrates have already been discovered for ERKs. Many of these substrates are localized in the nucleus, and seem to participate in the regulation of transcription upon stimulation. However, other substrates are found in the cytosol as well as in other cellular organelles, and those are responsible for processes such as translation, mitosis and apoptosis. Moreover, the MAPK/ERK cascade is also involved in the regulation of the endosomal dynamics, including lysosome processing and endosome cycling through the perinuclear recycling compartment (PNRC), as well as in the fragmentation of the Golgi apparatus during mitosis.
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Gene ID:	26413
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UniProt:	P63085
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Application Details

Application Notes:	WB 1:300-5000 IHC-P 1:200-400 IHC-F 1:100-500
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Handling

Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Handling Advice:	Do NOT add Sodium Azide! Use of Sodium Azide will inhibit enzyme activity of horseradish peroxidase.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
Expiry Date:	12 months

Publications

Product cited in:	Zhang, Zhao, Zhang, Hao, Yu, Min, Li, Ma, Chen, Yi, Tang, Meng, Liu, Wang, Shen, Zhang: "Decrease in male mouse fertility by hydrogen sulfide and/or ammonia can be inheritable." in: Chemosphere, Vol. 194, pp. 147-157, (2018) (PubMed). Zhao, Zhang, Liu, Zhang, Hao, Li, Chen, Shen, Tang, Min, Meng, Wang, Yi, Zhang: "Hydrogen Sulfide and/or Ammonia Reduces Spermatozoa Motility through AMPK/AKT Related Pathways." in: Scientific reports, Vol. 6, pp. 37884, (2016) (PubMed).
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