

Datasheet for ABIN3031826

anti-ERK1/2 antibody





Overview

Quantity	0.4 mL
Quantity:	U.4 ITIL
Target:	ERK1/2 (MAPK1/3)
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ERK1/2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	Purified His-tagged protein was used to produced this monoclonal ERK1/2 antibody.
Clone:	784CT7-6-3
Isotype:	lgG2a
Purification:	Purified

Target Details

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

UniProt:

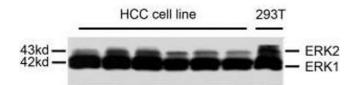
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Application Details

Application Notes:	Titration of the ERK1/2 antibody may be required due to differences in protocols and
	secondary/substrate sensitivity.\. Western blot: 1:1000
Restrictions:	For Research Use only

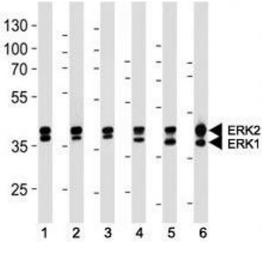
Handling

Format:	Liquid
Buffer:	In 1X PBS pH 7.4 with 0.09 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Aliquot the ERK1/2 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.



Western Blotting

Image 1. Western blot analysis of extracts from HCC cell line and 293T cells using ERK1/2 antibody.



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Western Blotting

Image 2. ERK1/2 antibody western blot analysis in (1) 293, (2) MCF-7, (3) Jurkat, (4) mouse NIH3T3, (5) rat C6 cell line and (6) mouse heart lysate. ERK1 ~42 kDa, ERK2 ~43 kDa

Western Blotting

Image 3. ERK1/2 antibody western blot analysis in (1) 293, (2) MCF-7, (3) Jurkat, (4) mouse NIH3T3, (5) rat C6 cell line and (6) mouse heart lysate. ERK1 ~42 kDa, ERK2 ~43 kDa