Datasheet for ABIN6241069

anti-ERK1/2 antibody (pThr202, pTyr204)

2 Images

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Overview

Quantity:	200 µL
Target:	ERK1/2 (MAPK1/3)
Binding Specificity:	AA 176-208, pThr202, pTyr204
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ERK1/2 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This Phospho-Erk1/2(Thr202/Tyr204) antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 176-208 amino acids from human Phospho-Erk1/2(Thr202/Tyr204).
Clone:	RB41825
Isotype:	Ig Fraction
Predicted Reactivity:	D, B, Rat, X, E
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	ERK1/2 (MAPK1/3)

Target Details

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 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. The substrates include transcription factors (such as ATF2, BCL6, ELK1, ERF, FOS, HSF4 or SPZ1), cytoskeletal elements (such as CANX, CTTN, GJA1, MAP2, MAPT, PXN, SORBS3 or STMN1), regulators of apoptosis (such as BAD, BTG2, CASP9, DAPK1, IER3, MCL1 or PPARG), regulators of translation (such as EIF4EBP1) and a variety of other signaling-related molecules (like ARHGEF2, FRS2 or GRB10). Protein kinases (such as RAF1, RPS6KA1/RSK1, RPS6KA3/RSK2, RPS6KA2/RSK3, RPS6KA6/RSK4, SYK, MKNK1/MNK1, MKNK2/MNK2, RPS6KA5/MSK1, RPS6KA4/MSK2, MAPKAPK3 or MAPKAPK5) and phosphatases (such as DUSP1, DUSP4, DUSP6 or DUSP16) are other substrates which enable the propagation the MAPK/ERK signal to additional cytosolic and nuclear targets, thereby extending the specificity of the cascade.
Molecular Weight:	43136
UniProt:	P27361

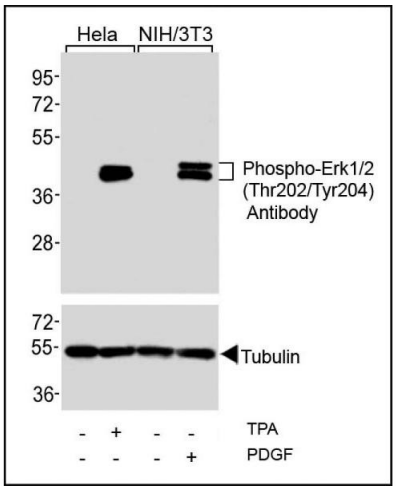
Application Details

Application Notes:	WB: 1:1000. WB: 1:1000
Restrictions:	For Research Use only

Handling

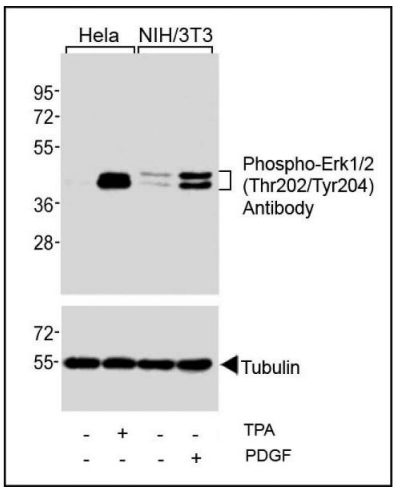
Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Expiry Date:	6 months

Images



Western Blotting

Image 1. Western blot analysis of extracts from Hela cells, untreated or treated with T (200nM), and NIH/3T3 cells, untreated or treated with PDGF (100 ng/mL), using Phospho-Erk1/2(Thr202/Tyr204) Antibody (upper) or Tubulin (lower).



Western Blotting

Image 2. Western blot analysis of extracts from Hela cells, untreated or treated with T (200nM), and NIH/3T3 cells, untreated or treated with PDGF (100 ng/mL), using Phospho-Erk1/2(Thr202/Tyr204) Antibody (upper) or Tubulin (lower).