



Rabbit Anti-Human ERK1/2 monoclonal antibody, clone TA3-5 (CABT-L594)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	Phospho-Erk1(T202)+Erk2(T185)
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Clone	TA3-5
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC, IHC, FC
Molecular Weight	42/44 kDa
Cellular Localization	Cytoplasm, Nucleus.
Positive Control	A549, NIH/3T3, MCF-7, human lung cancer tissue, human kidney tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
Preservative	0.05% Sodium Azide

Storage

Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction

Mitogen-activated protein kinases (MAPKs) are a widely conserved family of serine/threonine protein kinases involved in many cellular programs, such as cell proliferation, differentiation, motility, and death. The p44/42 MAPK (Erk1/2) signaling pathway can be activated in response to a diverse range of extracellular stimuli including mitogens, growth factors, and cytokines, and research investigators consider it an important target in the diagnosis and treatment of cancer. Upon stimulation, a sequential three-part protein kinase cascade is initiated, consisting of a MAP kinase kinase kinase (MAPKKK or MAP3K), a MAP kinase kinase (MAPKK or MAP2K), and a MAP kinase (MAPK). Multiple p44/42 MAP3Ks have been identified, including members of the Raf family, as well as Mos and Tpl2/COT. MEK1 and MEK2 are the primary MAPKKs in this pathway. MEK1 and MEK2 activate p44 and p42 through phosphorylation of activation loop residues Thr202/Tyr204 and Thr185/Tyr187, respectively. Several downstream targets of p44/42 have been identified, including p90RSK and the transcription factor Elk-1. p44/42 are negatively regulated by a family of dual-specificity (Thr/Tyr) MAPK phosphatases, known as DUSPs or MKPs, along with MEK inhibitors, such as U0126 and PD98059.
