

Anti-ERK5 Rabbit Monoclonal Antibody
Catalog # ABO13464**Specification**

Anti-ERK5 Rabbit Monoclonal Antibody - Product Information

Application	WB, IF, ICC, IP, FC
Primary Accession	Q13164
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-ERK5 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-ERK5 Rabbit Monoclonal Antibody - Additional Information

Gene ID 5598

Other Names

Mitogen-activated protein kinase 7, MAP kinase 7, MAPK 7, 2.7.11.24, Big MAP kinase 1, BMK-1, Extracellular signal-regulated kinase 5, ERK-5, MAPK7, BMK1, ERK5, PRKM7

Calculated MW

88386 MW KDa

Application Details

WB 1:1000-1:2000
ICC/IF 1:50-1:200
IP 1:50
FC 1:50

Subcellular Localization

Cytoplasm. Nucleus. Nucleus, PML body. Translocates to the nucleus upon activation.

Tissue Specificity

Expressed in many adult tissues. Abundant in heart, placenta, lung, kidney and skeletal muscle. Not detectable in liver..

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human ERK5

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for

**up to one month. Avoid repeated
freeze-thaw cycles.**

Anti-ERK5 Rabbit Monoclonal Antibody - Protein Information

Name MAPK7

Synonyms BMK1, ERK5, PRKM7

Function

Plays a role in various cellular processes such as proliferation, differentiation and cell survival. The upstream activator of MAPK7 is the MAPK kinase MAP2K5. Upon activation, it translocates to the nucleus and phosphorylates various downstream targets including MEF2C. EGF activates MAPK7 through a Ras-independent and MAP2K5-dependent pathway. As part of the MAPK/ERK signaling pathway, acts as a negative regulator of apoptosis in cardiomyocytes via interaction with STUB1/CHIP and promotion of STUB1-mediated ubiquitination and degradation of ICER-type isoforms of CREM (By similarity). May have a role in muscle cell differentiation. May be important for endothelial function and maintenance of blood vessel integrity. MAP2K5 and MAPK7 interact specifically with one another and not with MEK1/ERK1 or MEK2/ERK2 pathways. Phosphorylates SGK1 at Ser-78 and this is required for growth factor-induced cell cycle progression. Involved in the regulation of p53/TP53 by disrupting the PML-MDM2 interaction.

Cellular Location

Cytoplasm. Nucleus. Nucleus, PML body. Note=Translocates to the nucleus upon activation

Tissue Location

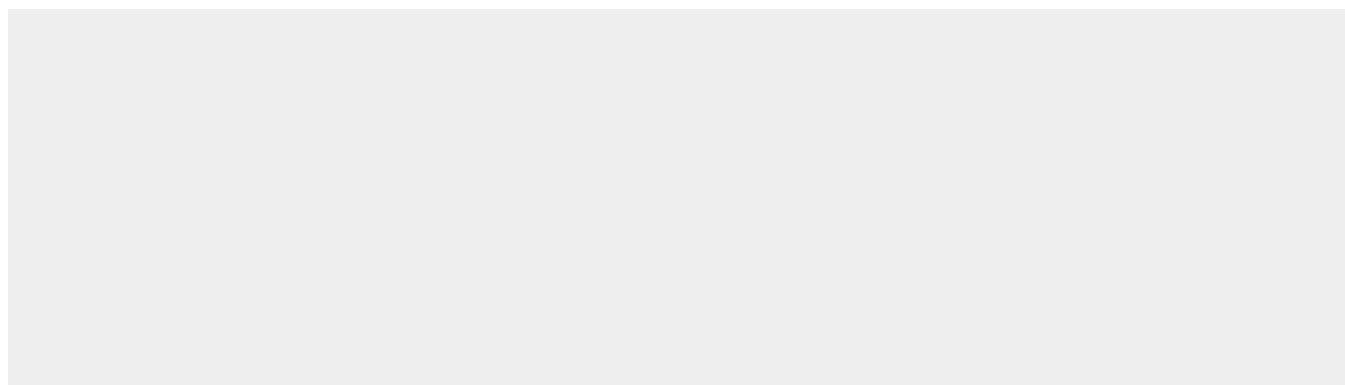
Expressed in many adult tissues. Abundant in heart, placenta, lung, kidney and skeletal muscle. Not detectable in liver

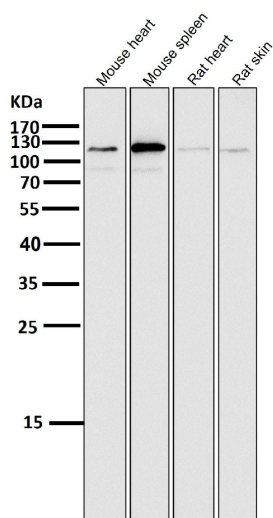
Anti-ERK5 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

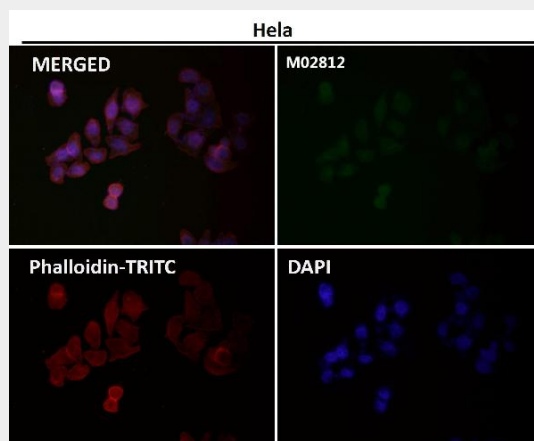
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-ERK5 Rabbit Monoclonal Antibody - Images

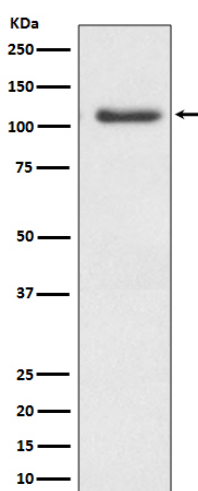




All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



Immunofluorescent analysis using the Antibody at 1:50 dilution.



Western blot analysis of ERK5 expression in HeLa cell lysate.