

# Anti-ERK5 Rabbit Monoclonal Antibody

Catalog # ABO13464

## Product Information

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|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IF, ICC, IP, FC                                                                                                                        |
| <b>Primary Accession</b> | <a href="#">Q13164</a>                                                                                                                     |
| <b>Host</b>              | Rabbit                                                                                                                                     |
| <b>Isotype</b>           | Rabbit IgG                                                                                                                                 |
| <b>Reactivity</b>        | Rat, Human, Mouse                                                                                                                          |
| <b>Clonality</b>         | Monoclonal                                                                                                                                 |
| <b>Format</b>            | Liquid                                                                                                                                     |
| <b>Description</b>       | Anti-ERK5 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat. |

## Additional Information

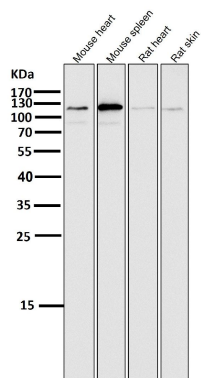
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|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 5598                                                                                                                                                                   |
| <b>Other Names</b>              | 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 |
| <b>Calculated MW</b>            | 88386                                                                                                                                                                  |
| <b>Application Details</b>      | WB 1:1000-1:2000<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50                                                                                                            |
| <b>Subcellular Localization</b> | Cytoplasm. Nucleus. Nucleus, PML body. Translocates to the nucleus upon activation.                                                                                    |
| <b>Tissue Specificity</b>       | Expressed in many adult tissues. Abundant in heart, placenta, lung, kidney and skeletal muscle. Not detectable in liver..                                              |
| <b>Source</b>                   | Eukaryota                                                                                                                                                              |
| <b>Contents</b>                 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.                                                    |
| <b>Clone Names</b>              | Clone: HCD-13                                                                                                                                                          |
| <b>Immunogen</b>                | A synthesized peptide derived from human ERK5                                                                                                                          |
| <b>Purification</b>             | Affinity-chromatography                                                                                                                                                |
| <b>Storage</b>                  | 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.                             |

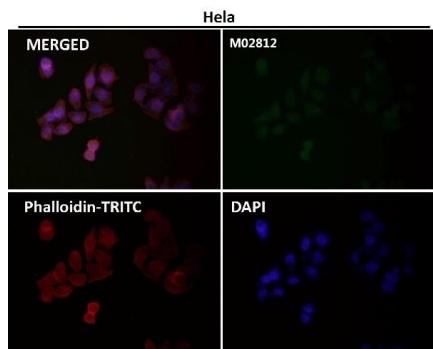
# Protein Information

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

# Images

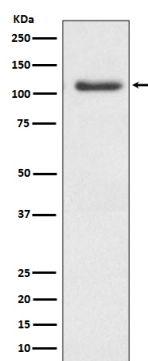


All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



Immunofluorescent analysis using the Antibody at 1:50 dilution.

Western blot analysis of ERK5 expression in HeLa cell lysate.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.