

## Product datasheet for **TP303506L**

### ERK5 (MAPK7) (NM\_002749) Human Recombinant Protein

#### Product data:

|                                       |   |
|---------------------------------------|---|
| Product Type:                         | Recombinant Proteins  |
| Description:                          | Recombinant protein of human mitogen-activated protein kinase 7 (MAPK7), transcript variant 3, 1 mg |
| Species:                              | Human   |
| Expression Host:                      | HEK293T   |
| Expression cDNA Clone or AA Sequence: | >RC203506 protein sequence<br><b>Red</b> =Cloning site <b>Green</b> =Tags(s)                        |

MAEPLKEEDGEDGSAEPPGPVKAEPAAHTAASVAAKLNALLKARSFDVTFDVGDEYEIETIGNGAYGWVS  
SARRRLTGQQVAIKKIPNAFDVVTNAKRTLRELKILKHFKHDNIIAIKDILRPTVPYGEFKSVYVLDLM  
ESDLHQIHSQPLTLEHVRYFLYQLLRGLKYMHSQAQVIHRDLKPSNLLVNENCELKIGDFGMARGLCTS  
PAEHQYFMTEYVATRWYRAPELMLSLHEYTAIDLWSVGCIFGEMLARRQLFPGKKNYVHQLQLIMMVLGT  
PSPAVIQAVGAERVYAIQSLPPRQVPVWETVYPGADRQALSLLGRMLRFEPSARISAAAALRHPFLAKY  
HDPDDEPDCAPPFDFAFDREALTRERIKEAIVAEIEDFHARREGIRQQIRFQPSLQPVASEPGCPDVEMP  
SPWAPSGDCAMESPPPAPPPCPGPAPDTIDLTLQPPPPVSEPAPPKKDGAISDNTKAALKAALLKSLRSR  
LRDGPSAPLEAPEPRKPVTAQERQREREERKRRRRQERAKEREKRRQERERKERGAGASGGPSTDPLAGLV  
LSDNDRSLLERWTRMARPAAPALTSVPAPAPAPTPTPTPVQPTSPPPGPVAQPTGPQPQSAGSTSGPVPQ  
PACPPPGPAPHPTGPPGPIVPAPPQIATSTSLAAQSLVPPPGLPGSSTPGVLPYFPPGLPPPDPAGGAP  
QSSMSESPDVNLVTQQLSKSQVEDPLPPVFSGTPKGSAGYGVGFLEEFLNQSFDMGVADGPQDGGQADS  
ASLSASLLADWLEGHGMNPADIESLQREIQMDSPMLLADLPDLQDP

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

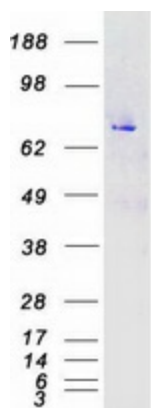
|                |  |
|----------------|--|
| Tag:           | C-Myc/DDK  |
| Predicted MW:  | 88.2 kDa   |
| Concentration: | >0.05 µg/µL as determined by microplate BCA method   |
| Purity:        | > 80% as determined by SDS-PAGE and Coomassie blue staining  |
| Buffer:        | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol   |
| Preparation:   | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps. |



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|                          |   |
|--------------------------|---|
| <b>Note:</b>             | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.  |
| <b>Storage:</b>          | Store at -80°C.   |
| <b>Stability:</b>        | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.   |
| <b>RefSeq:</b>           | <a href="#">NP_002740</a>   |
| <b>Locus ID:</b>         | 5598  |
| <b>UniProt ID:</b>       | <a href="#">Q13164</a> , <a href="#">A0A024QZ20</a>   |
| <b>RefSeq Size:</b>      | 2972  |
| <b>Cytogenetics:</b>     | 17p11.2   |
| <b>RefSeq ORF:</b>       | 2448  |
| <b>Synonyms:</b>         | BMK1; ERK4; ERK5; PRKM7   |
| <b>Summary:</b>          | The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase is specifically activated by mitogen-activated protein kinase kinase 5 (MAP2K5/MEK5). It is involved in the downstream signaling processes of various receptor molecules including receptor type kinases, and G protein-coupled receptors. In response to extracellular signals, this kinase translocates to cell nucleus, where it regulates gene expression by phosphorylating, and activating different transcription factors. Four alternatively spliced transcript variants of this gene encoding two distinct isoforms have been reported. [provided by RefSeq, Jul 2008] |
| <b>Protein Families:</b> | Druggable Genome, Protein Kinase  |
| <b>Protein Pathways:</b> | Gap junction, GnRH signaling pathway, MAPK signaling pathway, Neurotrophin signaling pathway  |

### Product images:



Coomassie blue staining of purified MAPK7 protein (Cat# [TP303506]). The protein was produced from HEK293T cells transfected with MAPK7 cDNA clone (Cat# [RC203506]) using MegaTran 2.0 (Cat# [TT210002]).