

Product datasheet for RC203506L3

OriGene Technologies, Inc.

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ERK5 (MAPK7) (NM_002749) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ERK5 (MAPK7) (NM_002749) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: ERK5

Synonyms: BMK1; ERK4; ERK5; PRKM7

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

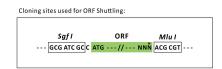
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC203506).

Sequence:

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Sgfl-Mlul

Restriction Sites: Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_002749

ORF Size: 2448 bp



ERK5 (MAPK7) (NM_002749) Human Tagged Lenti ORF Clone - RC203506L3

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 002749.2</u>

 RefSeq Size:
 2972 bp

 RefSeq ORF:
 2451 bp

 Locus ID:
 5598

 UniProt ID:
 013164

Domains:

Cytogenetics: 17p11.2

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Gap junction, GnRH signaling pathway, MAPK signaling pathway, Neurotrophin signaling

pathway

pkinase, TyrKc, S TKc

MW: 88.4 kDa

Gene Summary: 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

extracelluar 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]