

Product datasheet for RC214083L3

OriGene Technologies, Inc.

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CDC42 binding protein kinase alpha (CDC42BPA) (NM_003607) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CDC42 binding protein kinase alpha (CDC42BPA) (NM_003607) Human Tagged Lenti ORF

Clone

Tag: Myc-DDK

Symbol: CDC42 binding protein kinase alpha

Synonyms: MRCK; MRCKA; PK428

Mammalian Cell

Selection:

Puromycin

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

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

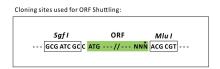
ORF Nucleotide

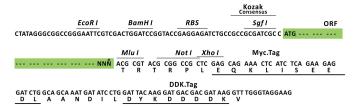
The ORF insert of this clone is exactly the same as(RC214083).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



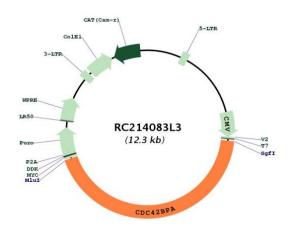


^{*} The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_003607 **ORF Size:** 1424 bp

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 003607.2</u>

RefSeq Size: 8019 bp
RefSeq ORF: 5160 bp
Locus ID: 8476
UniProt ID: Q5VT25



CDC42 binding protein kinase alpha (CDC42BPA) (NM_003607) Human Tagged Lenti ORF Clone – RC214083L3

Cytogenetics: 1q42.13

Domains: pkinase, S_TK_X, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

MW: 199.86 kDa

Gene Summary: The protein encoded by this gene is a member of the serine/threonine protein kinase family.

This kinase contains multiple functional domains. Its kinase domain is highly similar to that of the myotonic dystrophy protein kinase (DMPK). This kinase also contains a Rac interactive binding (CRIB) domain, and has been shown to bind CDC42. It may function as a CDC42 downstream effector mediating CDC42 induced peripheral actin formation, and promoting cytoskeletal reorganization. Multiple alternatively spliced transcript variants have been

described. [provided by RefSeq, Sep 2018]