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Product datasheet for RC216024

RIP (RIPK1) (NM_003804) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RIP (RIPK1) (NM_003804) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RIP
Synonyms:	AIEFL; IMD57; RIP; RIP-1; RIP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC216024 representing NM_003804
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAACCAGACATGTCCTTGAATGTCATTAAGATGAAATCCAGTGACTTCCTGGAGAGTGCAGAACTGG
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CCTGAAAATATCCTTGTTGATAATGACTTCCACATTAAGATCGCAGACCTCGGCCTTGCCTCCTTTAAGA
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AGTACCTTCAAGCCGGTCAAATTCAGCCACAGAACAGCCTGGTTCACTGCACAGTTCCCAGGGACTTGGG
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ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216024 representing NM_003804
Red=Cloning site Green=Tags(s)

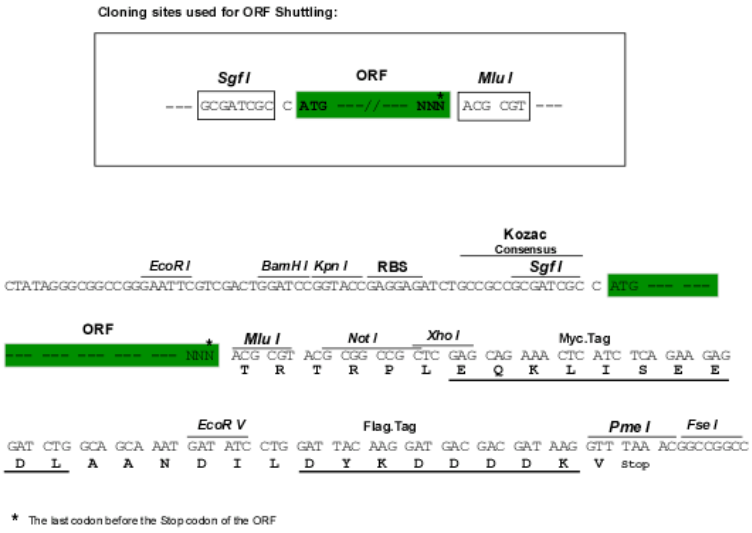
MQPDMSLNVIKMKSSDFLESAELDSGGFGKVSLCFHRTQGLMIMKTVYKGPNCIEHNEALLEEAKMMNRL
RHSRVVKLLGVIIEEGKYSLVMEYMEKGNLMHVLKAEMSTPLSVKGRIILEIIEGMCYLHGKGVIHKDLK
PENILVDNDFHIKIADLGLASFKMWSKLNNEEHNELREVDGTAKKNGGTLYYMAPEHLNDVNAKPTEKSD
VYSFAVVLWAIFANKEPYENAICEQQLIMCIKSGNRPDVDDITEYCPREIISLMKLCWEANPEARPTFPG
IEEKFRPFYLSQLEESVEEDVKSLKKEYSNENAVVKRMQSLQLDCVAVPSSRSNSATEQPGSLHSSQGLG
MGPVEESWFAPSLEHPQEENEPSLQSKLQDEANYHLYGSRMDRQTKQQPRQNVAYNREEERRRRVSHDPF
AQQRPYENFQNTEGKGTAYSSAASHGNAVHQPSGLTSQPQVLYQNNGLYSSHGFGTRPLDPGTAGPRVWY
RPIPSHMPSLHNIPVPETNYLGNTPTMPFSSLPPTDESIKYTIYNSTGIQIGAYNYMEIGGTSSSLLDST
NTNFKEEPAAKYQAIFDNTTSLTDKHLDPIRENLGKHWKNCARKLGFTQSQIDEIDHDYERDGLKEKVYQ
MLQKWVMREGIKGATVGKLAQALHQCSRIDLLSSLIYVSQN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6165_g04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003804

ORF Size: 2013 bp

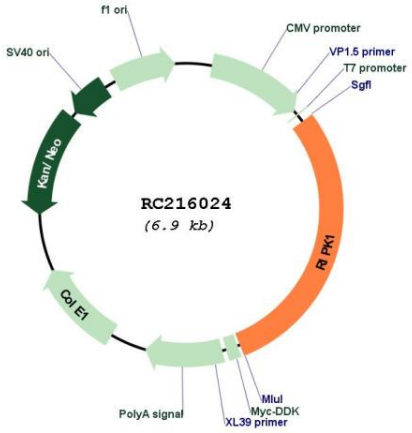
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

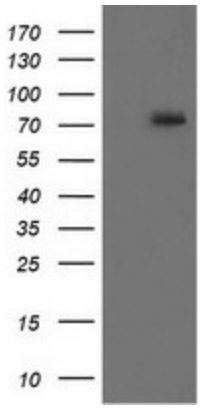
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_003804.6
RefSeq Size:	3864 bp
RefSeq ORF:	2016 bp
Locus ID:	8737
UniProt ID:	Q13546
Cytogenetics:	6p25.2
Domains:	DEATH, pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Apoptosis, Cytosolic DNA-sensing pathway, RIG-I-like receptor signaling pathway, Toll-like receptor signaling pathway
MW:	75.8 kDa
Gene Summary:	This gene encodes a member of the receptor-interacting protein (RIP) family of serine/threonine protein kinases. The encoded protein plays a role in inflammation and cell death in response to tissue damage, pathogen recognition, and as part of developmental regulation. RIPK1/RIPK3 kinase-mediated necrosis is referred to as necroptosis. Genetic disruption of this gene in mice results in death shortly after birth. [provided by RefSeq, Aug 2017]

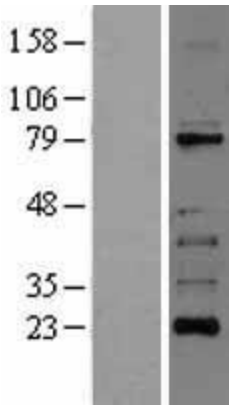
Product images:



Circular map for RC216024



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RIPK1 (Cat# RC216024, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RIPK1(Cat# [TA800312]). Positive lysates [LY401251] (100ug) and [LC401251] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401251]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216024 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).