

## Product datasheet for RC227943

### PTP kappa (PTPRK) (NM\_001135648) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTP kappa (PTPRK) (NM_001135648) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTP kappa
Synonyms:	R-PTP-kappa
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC227943 representing NM_001135648 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RC227943 representing NM\_001135648  
 Red=Cloning site Green=Tags(s)

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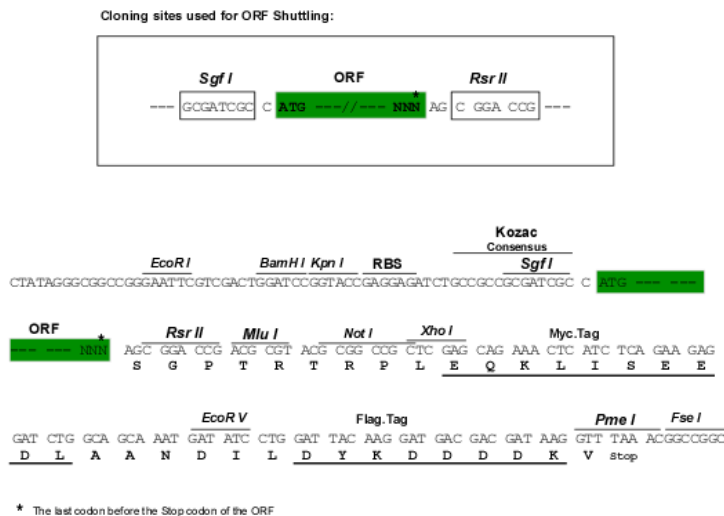
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Chromatograms: [https://cdn.origene.com/chromatograms/mg3661\\_c01.zip](https://cdn.origene.com/chromatograms/mg3661_c01.zip)

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM\_001135648

ORF Size: 4338 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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:** [NM\\_001135648.3](#)

**RefSeq ORF:** 4341 bp

**Locus ID:** 5796

**UniProt ID:** [Q15262](#)

**Cytogenetics:** 6q22.33

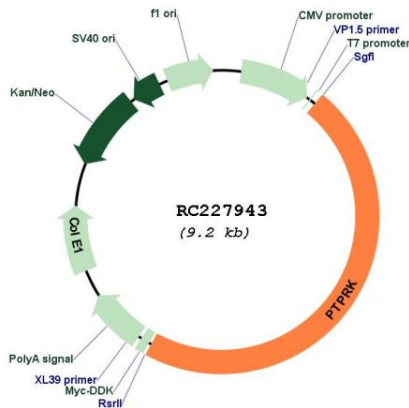
**Protein Families:** Druggable Genome, Phosphatase, Transmembrane

**MW:** 163.02 kDa

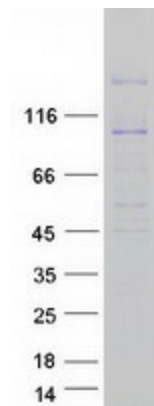
**Gene Summary:**

The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP possesses an extracellular region, a single transmembrane region, and two tandem catalytic domains, and thus represents a receptor-type PTP. The extracellular region contains a meprin-A5 antigen-PTP mu (MAM) domain, an Ig-like domain and four fibronectin type III-like repeats. This PTP was shown to mediate homophilic intercellular interaction, possibly through the interaction with beta- and gamma-catenin at adherens junctions. Expression of this gene was found to be stimulated by TGF-beta 1, which may be important for the inhibition of keratinocyte proliferation. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC227943



Coomassie blue staining of purified PTPRK protein (Cat# [TP327943]). The protein was produced from HEK293T cells transfected with PTPRK cDNA clone (Cat# RC227943) using MegaTran 2.0 (Cat# [TT210002]).