

Product datasheet for RC215289

MERTK (NM_006343) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MERTK (NM_006343) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MERTK
Synonyms:	c-Eyk; c-mer; MER; RP38; Tyro12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215289 representing NM_006343 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGCCGGCCCGCTGCCGCTGCTGCTGGGCCCTCTTCTCCCCGCGCTCTGGCGTAGAGCTATCACTG
AGGCAAGGAAGAAGCCAAGCCTTACCCGCTATCCCGGACCTTTCCAGGGAGCTGCAAACCTGACCA
CACACCGCTGTTATCCCTTCTCAGCCAGTGGGTACCAGCTGCCTTGATGTTTTACCAACCCAGCCT
GGAAGACCACATACAGGAAACGTAGCCATTCCCCAGGTGACCTCTGTGCAATCAAAGCCCTACCGCCTC
TTGCCTCAAACACACAGTTGGACACATAATACTTTCTGAACATAAAGGTGTCAAATTTAATTGCTCAAT
CAGTGTACCTAATATATACCAGGACACCACAATTTCTTGGTGAAAGATGGGAAGGAATTGCTTGGGGCA
CATCATGCAATTACACAGTTTTATCCAGATGATGAAGTTACAGCAATAATCGCTTCTTACGCATAACCA
GTGTGCAGCGTTCAGACAATGGGTGATATCTGTAAGATGAAAAATAACAATGAAGAGATCGTGTCTGA
TCCCATCTACATCGAAGTACAAGGACTTCTCACTTTACTAAGCAGCCTGAGAGCATGAATGTCACCAGA
AACACAGCCTTCAACCTCACCTGTGAGGCTGTGGGCCCGCTGAGCCCGTCAACATTTTCTGGGTTCAA
ACAGTAGCCGTGTTAACGAACAGCCTGAAAAATCCCCCTCCGTGCTAACTGTTCCAGGCCTGACGGAGAT
GGCGGTCTTCAGTTGTGAGGCCACAATGACAAAGGGCTGACCGTGTCCAAGGGAGTGCAGATCAACATC
AAAGCAATCCCTCCCCACCAACTGAAGTCAGCATCCGTAAACAGCACTGCACACAGCATTCTGATCCT
GGGTTCTGGTTTTGATGGATACTCCCCGTTCCAGGAATTGCAGCATTGAGGTCAAGGAAGCTGATCCGCT
GAGTAATGGCTCAGTCATGATTTTTAACACCTCTGCCTTACCACATCTGTACCAATCAAGCAGCTGCAA
GCCCTGGCTAATTACAGCATTGGTGTCTTCTGCATGAATGAAATAGGCTGGTCTGCAGTGAAGCCTTGG
TTCTAGCCAGCAGACTGAAGGAGCCCCATCAGTAGCACCTTTAATGTCAGTGTGTTTCTGAATGAATC
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CGGATATCCACGTGTGGCAGAGTGCAGGGATTTCCAAAGAGCTTTGGAGGAAGTTGGCCAGAATGGCA
GCCGAGCTCGGATCTCTGTTCAAGTCCACAATGCTACGTGCACAGTGAAGATTGCAGCCGTACCCAGAGG
GGGAGTTGGGCCCTTCAAGTATCCAGTGAATAATTTATCCCTGCACACGTTGGGTAGATTATGCCCC



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TCTTCAACTCCGGCGCCTGGCAACGCAGATCCTGTGCTCATCATCTTTGGCTGCTTTTGTGGATTATTT
 TGATTGGGTTGATTTTATACATCTCCTTGGCCATCAGAAAAAGAGTCCAGGAGACAAAGTTTGGGAATGC
 ATTCACAGAGGAGGATTCTGAATTAGTGGTGAATTATATAGCAAAGAAATCCTTCTGTGCGCGAGCCATT
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 CTCCACCCTTGCTCCACTGGACTTGAACATCGACCCTGACTCTATAATTGCCTCCTGCACTCCCCGCGCT
 GCCATCAGTGTGGTACAGCAGAAGTTCATGACAGCAAACCTCATGAAGGACGGTACATCCTGAATGGGG
 GCAGTGAGGAATGGGAAGATCTGACTTCTGCCCTCTGCTGCAGTACAGCTGAAAAGAACAGTGTTTT
 ACCGGGGGAGAGACTTGTAGGAATGGGGTCTCCTGGTCCCATTCGAGCATGCTGCCCTGGGAAGCTCA
 TTGCCCGATGAACCTTTGTTGCTGACGACTCCTCAGAAGGCTCAGAAGTCTGATG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215289 representing NM_006343
 Red=Cloning site Green=Tags(s)

MGPAPLPLLLGLFLPALWRRRAITEAREEAKPYPLFPFPFPGSLQDHTPLLSLPHASGYQPALMFSPQTP
 GRPHTGNVAIPQVTSVESKPLPPLAFKHTVGHILSEHKGVKFNCSISVPNIYQDTTISWWDGKELLGA
 HHAITQFYPDDEVTAIIASFSTSVQRSDNGSYICKMKINNEEIVSDPIYIEVQGLPHFTKQPESMNVTR
 NTAFLNLCQAVGPPEPVNIFWVQNSSRVNEQPEKSPSVLTVPGLTEMAVFSCEAHNDKGLTVSKGVQINI
 KAIPSPPEVTSIRNSTAHSILISWVPGFDGYSFPRNCSIQVKEADPLSNGSVMIFNTSALPHLYQIKQLQ
 ALANYSIGVSCMNEIGWSAVSPWILASTTEGAPSVAPLNVTVFLNESSDNVDIRWMPPTKQDDELVGY
 RISHVWQSAGISKELLEEVGQNGSRARISVQVHNATCTVRIA AAVTRGGVGFSDPVKIFIPAAGWVDYAP
 SSTPAPGNADPVLIIFGFCGFIILIGLILYISLAIRKRVQETKFGNAFTEEDSELVYNYIAKKSFCRRAI
 ELTLHSLGVSEELQNKLEDVVIDRNLILGKILGEGEFGSVMENLQEDGTSKLVAVKTMKLDNSSQRE
 IEEFLSEAACMKDFSHPNVIRLLGVCIESSQGIKPKMVILPFMKYGDHLTYLLYSRLETGPKHIPLQTL
 LKFMVDIALGMEYL SNRNF LHRDLAARNCLRDDMTVCVADFGLSKKIYSGDYRQGRIAKMPVKWIAIE
 SLADRVYTSKSDVWAFGVTMWEIATRGMTPYPGVQNHMYDYLLHGHRKQPEDCLDEL YEIMYSCWRD
 PLDRPTFVLRQLLEKLLLESLPDVRNQADVIVNTQLLESSEGLAQGSTLAPLDLNDPDSIIASCTPRA
 AISVVTAEVHDSKPHEGRYILNNGSEEWEDLSAPSAAVTAEKNSVLPGERLVRNGVSWSHSSMLPLGSS
 LPDELLFADDSSEGSEVLM

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_006343

ORF Size: 2997 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 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_006343.3](#)

RefSeq Size: 3632 bp

RefSeq ORF: 3000 bp

Locus ID: 10461

UniProt ID: [Q12866](#)

Cytogenetics: 2q13

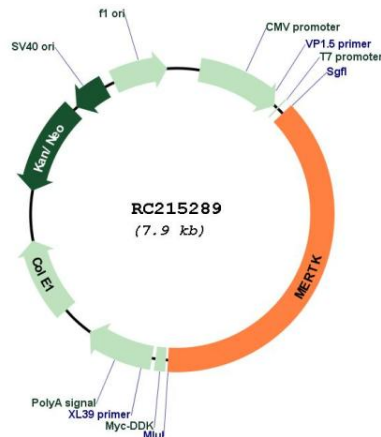
Domains: pkinase, TyrKc, S_TKc, ig, IG, FN3

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

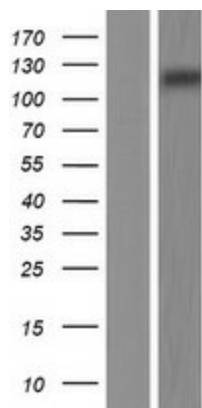
MW: 110.25 kDa

Gene Summary: This gene is a member of the MER/AXL/TYRO3 receptor kinase family and encodes a transmembrane protein with two fibronectin type-III domains, two Ig-like C2-type (immunoglobulin-like) domains, and one tyrosine kinase domain. Mutations in this gene have been associated with disruption of the retinal pigment epithelium (RPE) phagocytosis pathway and onset of autosomal recessive retinitis pigmentosa (RP). [provided by RefSeq, Jul 2008]

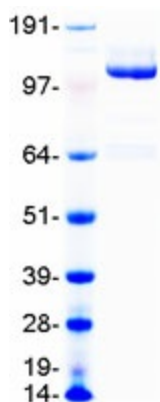
Product images:



Circular map for RC215289



Western blot validation of overexpression lysate (Cat# [LY416711]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215289 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MERTK protein (Cat# [TP315289]). The protein was produced from HEK293T cells transfected with MERTK cDNA clone (Cat# RC215289) using MegaTran 2.0 (Cat# [TT210002]).