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Product datasheet for RC214658

Enterokinase (TMPRSS15) (NM_002772) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Enterokinase (TMPRSS15) (NM_002772) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Enterokinase
Synonyms:	ENTK; PRSS7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214658 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGGGTCGAAAAGAGGCATATCTTCTAGGCATCATTCTCTCAGCTCCTATGAAATCATGTTTGCAGCTC TCTTTGCCATATTGGTAGTGCTCTGTGCTGGATTAATTGCAGTATCCTGCCTGACAATCAAGGAATCCCA ACGAGGTGCAGCACTTGGACAGAGTCATGAAGCCAGAGCGACATTTAAAATAACATCCGGAGTTACATAT AATCCTAATTTGCAAGACAAACTCTCAGTGGATTTCAAAGTTCTTGCTTTTGACCTTCAGCAAATGATAG ATGAGATCTTTCTATCAAGCAATCTGAAGAATGAATATAAGAACTCAAGAGTTTTACAATTTGAAAATGG CAGCATTATAGTCGTATTTGACCTTTTCTTTGCCCAGTGGGTGTCAGATCAAAATGTAAAAGAAGAACTG ATTCAAGGCCTTGAAGCAAATAAATCCAGCCAACTGGTCACTTTCCATATTGATTTGAACAGCGTTGATA TCCTAGACAAGCTAACAACCACCAGTCATCTGGCAACTCCAGGAAATGTCTCAATAGAGTGCCTGCCTGG TTCAAGTCCTTGTACTGATGCTCTAACGTGTATAAAAGCTGATTTATTTTGTGATGGAGAAGTAAACTGT CCAGATGGTTCTGACGAAGACAATAAAATGTGTGCCACAGTTTGTGATGGAAGATTTTTGTTAACTGGAT CATCTGGGTCTTTCCAGGCTACTCATTATCCAAAACCTTCTGAAACAAGTGTTGTCTGCCAGTGGATCAT ACGTGTAAACCAAGGACTTTCCATTAAACTGAGCTTCGATGATTTTAATACATATTATACAGATATATTA GATATTTATGAAGGTGTAGGATCAAGCAAGATTTTAAGAGCTTCTATTTGGGAAACTAATCCTGGCACAA TAAGAATTTTTTCCAACCAAGTTACTGCCACCTTTCTTATAGAATCTGATGAAAGTGATTATGTTGGCTT TAATGCAACATATACTGCATTTAACAGCAGTGAGCTTAATAATTATGAGAAAATTAATTGTAACTTTGAG GATGGCTTTTGTTTCTGGGTCCAGGATCTAAATGATGATAATGAATGGGAAAGGATTCAGGGAAGCACCT TTTCTCCTTTTACTGGACCCAATTTTGACCACACTTTTGGCAATGCTTCAGGATTTTACATTTCTACCCC AACTGGACCAGGAGGGAGACAAGAACGAGTGGGGCTTTTAAGCCTCCCTTTGGACCCCACTTTGGAGCCA GCTTGCCTTAGTTTCTGGTATCATATGTATGGTGAAAATGTCCATAAATTAAGCATTAATATCAGCAATG ACCAAAATATGGAGAAGACAGTTTTCCAAAAGGAAGGAAATTATGGAGACAATTGGAATTATGGACAAGT AACCCTAAATGAAACAGTTAAATTTAAGGTTGCTTTTAATGCTTTTAAAAACAAGATCCTGAGTGATATT

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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214658 protein sequence
Red=Cloning site Green=Tags(s)

MGSKRGISSRHHSLSSYEIMFAALFAILVVLCAGLIAVSCLTIKESQRGAALGQSHEARATFKITSGVTY
NPNLQDKLSVDFKVLAFDLQQMIDEIFLSSNLKNEYKNSRVLQFENGSIIVVFDLFFAQWVSDQNVKEEL
IQGLEANKSSQLVTFHIDLNSVDILDKLTTTSHLATPGNVSIECLPGSSPCTDALTCIKADLFCDGEVNC
PDGSDEDNKMCATVCDGRFLLTGSSGSFQATHYPKPSETSVVCQWIIRVNQGLSIKLSFDDFNTYYTDIL
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SCGKKLAAQDITPKIVGGSNAKEGAWPWVVGLYYGGRLLCGASLVSSDWLVSAAHCVYGRNLEPSKWTAI
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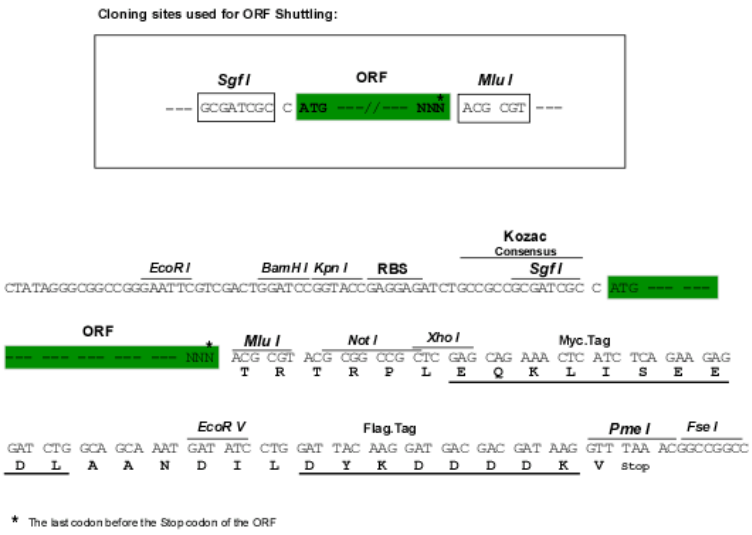
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6609_b08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002772

ORF Size: 3057 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: NM_002772.3

RefSeq Size: 3946 bp

RefSeq ORF: 3060 bp

Locus ID: 5651

UniProt ID: P98073

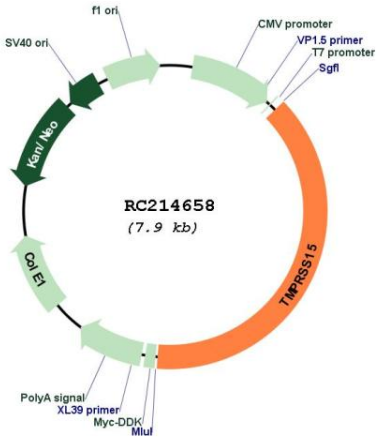
Cytogenetics: 21q21.1

Protein Families: Druggable Genome, Transmembrane

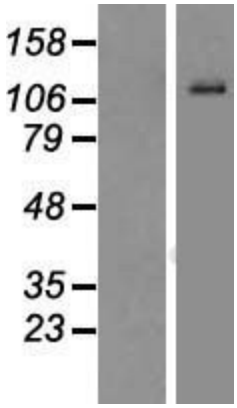
MW: 112.9 kDa

Gene Summary: This gene encodes an enzyme that converts the pancreatic proenzyme trypsinogen to trypsin, which activates other proenzymes including chymotrypsinogen and procarboxypeptidases. The precursor protein is cleaved into two chains that form a heterodimer linked by a disulfide bond. This protein is a member of the trypsin family of peptidases. Mutations in this gene cause enterokinase deficiency, a malabsorption disorder characterized by diarrhea and failure to thrive. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC214658



Western blot validation of overexpression lysate (Cat# [LY419121]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214658 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).