

Product datasheet for RC210817

EGF (NM_001963) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EGF (NM_001963) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EGF
Synonyms:	HOMG4; URG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210817 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC210817 protein sequence
 Red=Cloning site Green=Tags(s)

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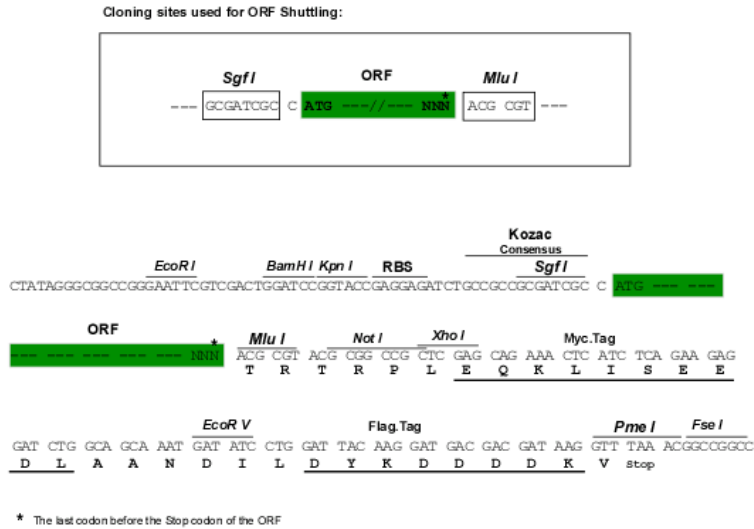
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Chromatograms:

https://cdn.origene.com/chromatograms/mk6261_g12.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:

ACCN:

NM_001963

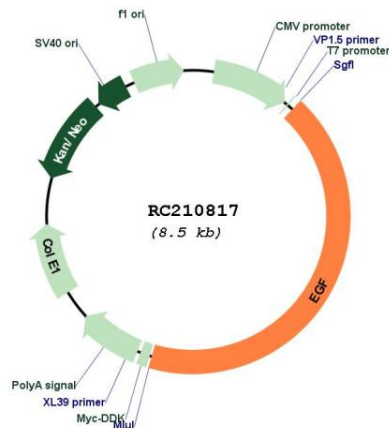
ORF Size:

3621 bp

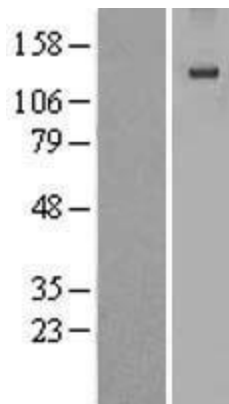
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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_001963.2 , NP_001954.1
RefSeq Size:	5600 bp
RefSeq ORF:	3624 bp
Locus ID:	1950
UniProt ID:	P01133
Cytogenetics:	4q25
Domains:	Idl_recept_b, EGF_CA, EGF, EGF
Protein Families:	Adult stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transmembrane
Protein Pathways:	Bladder cancer, Cytokine-cytokine receptor interaction, Endocytosis, Endometrial cancer, ErbB signaling pathway, Focal adhesion, Gap junction, Glioma, MAPK signaling pathway, Melanoma, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton
MW:	133.9 kDa

Gene Summary:

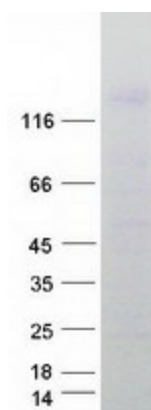
This gene encodes a member of the epidermal growth factor superfamily. The encoded preproprotein is proteolytically processed to generate the 53-amino acid epidermal growth factor peptide. This protein acts a potent mitogenic factor that plays an important role in the growth, proliferation and differentiation of numerous cell types. This protein acts by binding with high affinity to the cell surface receptor, epidermal growth factor receptor. Defects in this gene are the cause of hypomagnesemia type 4. Dysregulation of this gene has been associated with the growth and progression of certain cancers. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed. [provided by RefSeq, Jan 2016]

Product images:


Circular map for RC210817



Western blot validation of overexpression lysate (Cat# [LY419624]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210817 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EGF protein (Cat# [TP310817]). The protein was produced from HEK293T cells transfected with EGF cDNA clone (Cat# RC210817) using MegaTran 2.0 (Cat# [TT210002]).