

## Product datasheet for RC214928

### IGF1 Receptor (IGF1R) (NM\_000875) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	IGF1 Receptor (IGF1R) (NM_000875) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IGF1 Receptor
Synonyms:	CD221; IGFI; IGFIR; JTK13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214928 representing NM_000875 Red=Cloning site Blue=ORF Green=Tags(s)

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**Protein Sequence:** >RC214928 representing NM\_000875  
Red=Cloning site Green=Tags(s)

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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2522\\_d09.zip](https://cdn.origene.com/chromatograms/mg2522_d09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



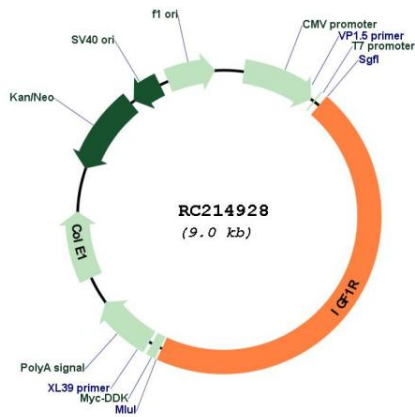
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_000875

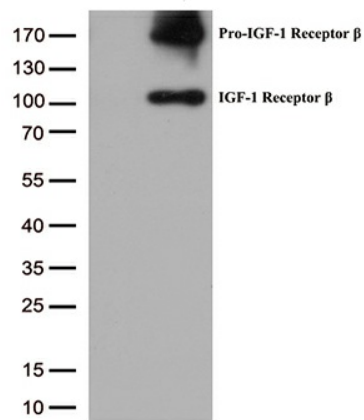
**ORF Size:** 4101 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_000875.5</a>
<b>RefSeq Size:</b>	4989 bp
<b>RefSeq ORF:</b>	4104 bp
<b>Locus ID:</b>	3480
<b>UniProt ID:</b>	<a href="#">P08069</a>
<b>Cytogenetics:</b>	15q26.3
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Protein Pathways:</b>	Adherens junction, Colorectal cancer, Endocytosis, Focal adhesion, Glioma, Long-term depression, Melanoma, Oocyte meiosis, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer
<b>MW:</b>	154.79 kDa
<b>Gene Summary:</b>	This receptor binds insulin-like growth factor with a high affinity. It has tyrosine kinase activity. The insulin-like growth factor I receptor plays a critical role in transformation events. Cleavage of the precursor generates alpha and beta subunits. It is highly overexpressed in most malignant tissues where it functions as an anti-apoptotic agent by enhancing cell survival. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, May 2014]

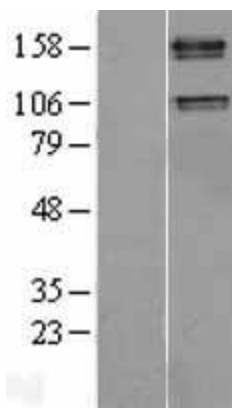
Product images:



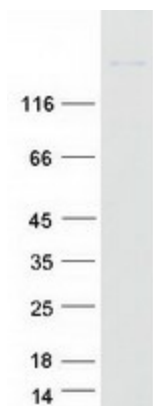
Circular map for RC214928



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IGF1R (Cat# RC214928, 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-IGF1R (Cat# [TA807835])(1:2000). Positive lysates [LY400311] (100ug) and [LC400311] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400311]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214928 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IGF1R protein (Cat# [TP314928]). The protein was produced from HEK293T cells transfected with IGF1R cDNA clone (Cat# RC214928) using MegaTran 2.0 (Cat# [TT210002]).