

Product datasheet for **RC205627**

Prolactin (PRL) (NM_000948) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prolactin (PRL) (NM_000948) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prolactin
Synonyms:	GHA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205627 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACATCAAAGGATCGCCATGGAAAGGGTCCCTCCTGCTGCTGCTGGTGTCAAACCTGCTCCTGTGCC
AGAGCGTGGCCCCCTTGCCCATCTGTCCCGCGGGGCTGCCGATGCCAGGTGACCCTTCGAGACCTGTT
TGACCGCGCCGTCGTCTGTCCCACTACATCCATAACCTCTCCTCAGAAATGTTACGCGAATTCGATAAA
CGGTATACCCATGGCCGGGGTTCATTACCAAGGCCATCAACAGCTGCCACACTTCTCCCTTGCCACCC
CCGAAGACAAGGAGCAAGCCCAACAGATGAATCAAAAAGACTTTCTGAGCCTGATAGTCAGCATATTGCG
ATCCTGGAATGAGCCTCTGTATCATCTGGTCACGGAAGTACGTGGTATGCAAGAAGCCCCGAGGCTATC
CTATCCAAAGCTGTAGAGATTGAGGAGCAAACCAACGGCTTCTAGAGGGCATGGAGCTGATAGTCAGCC
AGGTTTCCTGAAACCAAGAAAATGAGATCTACCCTGTCTGGTCGGGACTTCCATCCCTGCAGATGGC
TGATGAAGAGTCTCGCCTTTCTGCTTATTATAACCTGCTCCACTGCCTACGCAGGGATTACATAAAATC
GACAATTATCTCAAGCTCCTGAAGTGCCGAATCATCCACAACAACACTGC

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205627 protein sequence
 Red=Cloning site Green=Tags(s)

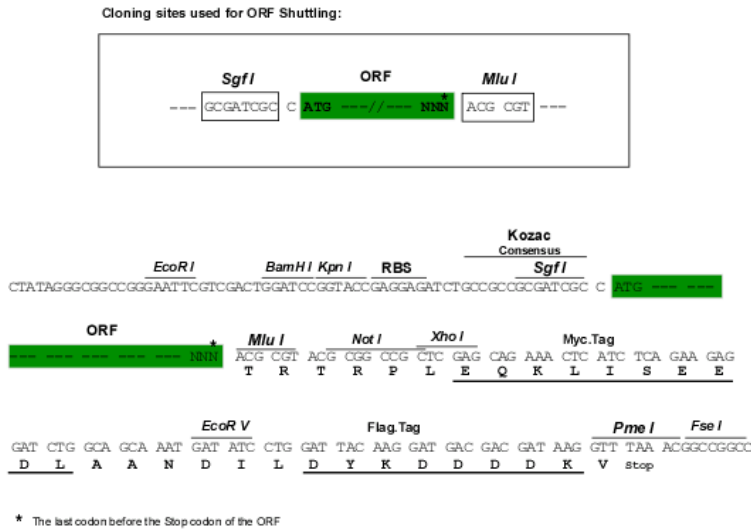
MNIKGGSPWKGSLLLLLVSNLLLCQSVAPLPICPGGAARCQVTLRDLFDRAVVLSHYIHNLSSEMFSEFDK
 RYTHGRGFITKAINSCHTSSLATPEDKEQAQMNQKDFLSLIVSLRSWNEPLYHLVTEVRGMQEAPFAI
 LSKAVEIEEQTKRLLLEGMELIVSQVHPETKENEIYPVWSGLPSLQMADEESRLSAYYNLLHCLRRDSHKI
 DNYLKLLKCRIIHNHNC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6069_c11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000948

ORF Size: 681 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_000948.6](#)

RefSeq Size: 1371 bp

RefSeq ORF: 684 bp

Locus ID: 5617

UniProt ID: [P01236](#)

Cytogenetics: 6p22.3

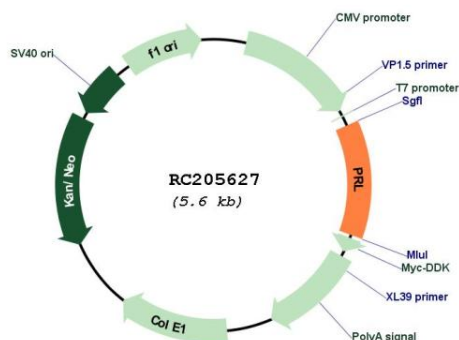
Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Neuroactive ligand-receptor interaction

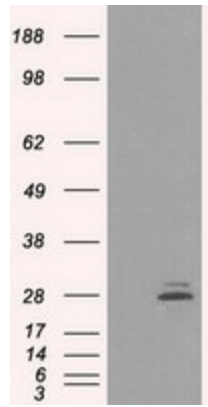
MW: 25.9 kDa

Gene Summary: This gene encodes the anterior pituitary hormone prolactin. This secreted hormone is a growth regulator for many tissues, including cells of the immune system. It may also play a role in cell survival by suppressing apoptosis, and it is essential for lactation. Alternative splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, Aug 2011]

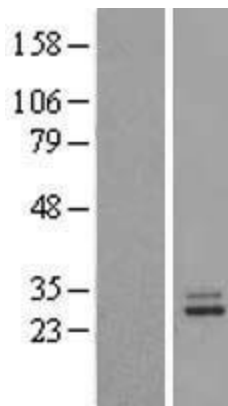
Product images:



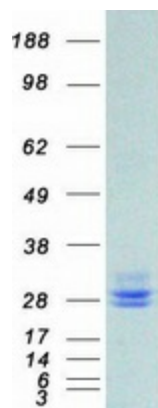
Circular map for RC205627



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PRL (Cat# RC205627, 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-PRL (Cat# [TA500719]). Positive lysates [LY424443] (100ug) and [LC424443] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY431796]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC228768] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRL protein (Cat# [TP305627]). The protein was produced from HEK293T cells transfected with PRL cDNA clone (Cat# RC205627) using MegaTran 2.0 (Cat# [TT210002]).