

Product datasheet for **RC212627**

POF1B (NM_024921) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POF1B (NM_024921) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	POF1B
Synonyms:	POF; POF2B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC212627 representing NM_024921
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGCTCGAGCTATTGGAGTGAGACGAGCAGCAGCTGTGGAACCCAGCAGCTCCAGAGGTGCTGC
 AGTGCCAGCCCCAGCATTACCACTGCTACCATCAGTCAAGCCAAGCCAGCAGCCTCCAGAAAAAATGT
 AGTGTATGAGCGAGTGAGGACCTACAGTGGGCCATGAACAAGGTGGTGCAGGCCTTGACCCCTCAAC
 TCACGGGAAGTGCTCTCCCTCTCAAACCACCTCCTCTACAAAATTTGGTTGGAGCGACCATTCTC
 AGGAACTCCATTCCAACCTTTAAAAATATCTACATGTGCCCAAGTACTCTACATATAACCCAAAATAC
 TGAACAGGAACCTCATTCTCAACAGTGAACCTTACTACATATCCACAGACCACTATTAGGAAATATGTA
 GTACAAAATCCTGAACAGGAACCACTGTCTCAATTCCTAAGAGGAAGCCATTTCTCCAGGAAACAATG
 TTATTTATGAAAAACAATAAGAAAAGTGGAGAAGCTAAATACTGATCAGGGGTGCCATCCTCAGGCTCA
 ATGCCATCATCACATTATCCAACAGCCCAGGTATCCACTCTGCACACTGGCAACAACCTGATTCTAGC
 CAGCAAATCCAAGCCATCACAGGAAATAATCCAATTTCTACACATATTGAAATGAACTGTGCCATAGTG
 ATCAAGCCAGATTTGTGAGCAGGTGATAATTCAGGATGATGGCCCTGAAAAATGGACCCAGATATTT
 TGGAGAGTTGCTTGTGATCTGAGCCGTAAGAATACGGATCTATACACTGCTTATTAGAACATTTGCAG
 AGAATTGGAGGAAGCAACAGGACTTTGAGTCTACAGATGAGTCGGAAGACATTGAATCATTGATTCCTA
 AAGGATTATCAGAGTTTACAAAACAGCAAATACGCTACATTCTGCAGATGAGGGGTATGTCTGATAAGTC
 ACTCCGACTAGTGTGTCCATTTAGCAACATACGGGAGGAGCTTGGACATCTTCAAAATGATTTGACA
 TCACTGGAAAATGACAAGATGAGACTTGAGAAAGATTTATCATTCAAAGACTCAATTAAGAGTACG
 AAGAATCTTGGCATCAGTGAGAGCAAATAATCACCAGCAGCAGCAAGGACTTCAAGACTCAAGTTCAA
 ATGCCAGGCATTGGAAGAAAACAATCTCTCTTCGACATACACTATCAGACATGGAATACAGACTAAAA
 GAACTGGAATATTGTAACGTAATTTAGAGCAAGAGAATCAAAACCTTAGAATGCAGTTTCTGAGACT
 GCACAGGCCCAATGTTGCAGGCTAAAATGGATGAGATTGGCAACCACTACACGGAGATGGTAAAAA
 ACTT GAGAATGGAGAAAGATAGAGAGATCTGCAGACTGAGGTCCCAATTAACCAGTACCATAAAGATGTTTCA
 AAGAGAGAAGGAAGTTGTAGTACTTCAATTTAAGCTTCATGAACTGACAAGCTTGCTGGAAGAGAAGG
 ATTCCTCATAAAGCGTCAGTCAGAGGAACTCTCAAGTTGCGGCAAGAAATATATTCTCTCATAACCA
 ACCCTCCACTGGTGAAGGACTACTATTACCACTAAAAAGTACAGGACACAATATCCAATCCTAGGCCTC
 CTATATGATGACTACGAATATATACCACCAGGTAGTGAACACAGACTATTGTGATTGAGAAAACAGAAG
 ACAAATACACTTGTCCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212627 representing NM_024921
 Red=Cloning site Green=Tags(s)

MSSSYWSETSSSSCGTQQLEPEVLQCQPQHYHCYHQSSQAQQPPEKNVYERVRTYSGPMNKVVQALDPFN
 SREVLSPKTTSSYQNLVSDHSQELHSPTLKISTCAPSTLHITQNTQEELHSPTVKLTTYPQTTIRKYV
 VQNPEQEPLSQFLRGSFFPGNNVIYEKTKRVEKLNLDQGCHPQAQCHHHIIQQPQVIHSAHWQPDSS
 QQIQAITGNPISHTHIGNELCHSGSSQICEQVIIQDDGPEKLDPRYFGELLADLSRKNTDLYHCLLEHLQ
 RIGGSKQDFESTDESEDIESLIPKGLSEFTKQIRYILQMRGMSDKSLRLVLSFNSIREELGHLQNDLT
 SLENDKMRLKDLSEFKDTQLKEYEELLASVRANNHQQQQLQDSSSKCQALEENLRLRHTLSDMEYRLK
 ELEYCKRNLEQENQNLRMQVSETCTGPMLQAKMDEIGNHYTEMVKNLRMEKDREICRLRSQNLNQYHKDVS
 KREGSCSDFQFKLHELTSLLEEKDSLKRQSEELSKLRQEIYSSHNQPSGGRTTITTKYVRTQYPILGL
 LYDDYEYIPPGSETQTIVIEKTEDKYTCP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6119_d03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_024921

ORF Size: 1767 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_024921.4](#)

RefSeq Size: 3942 bp

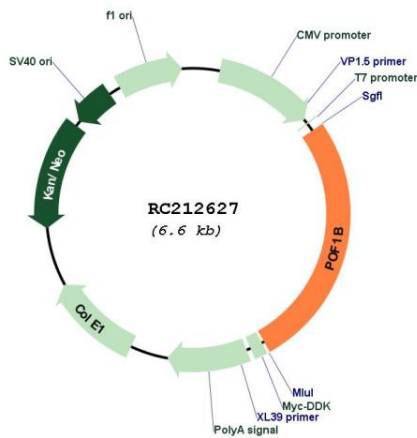
RefSeq ORF: 1770 bp

Locus ID: 79983

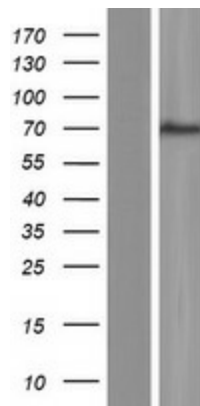
UniProt ID: [Q8WV4](#)
 Cytogenetics: Xq21.1
 MW: 67.9 kDa

Gene Summary: Premature ovarian failure (POF) is characterized by primary or secondary amenorrhea in women less than 40 years old. Two POF susceptibility regions called "POF1" and "POF2" have been identified by breakpoint mapping of X-autosome translocations. POF1 extends from Xq21-qter while POF2 extends from Xq13.3 to Xq21.1. This gene, POF1B, resides in the POF2 region. This gene is expressed at trace levels in mouse prenatal ovary and is barely detectable or absent from adult ovary, in human and in the mouse respectively. This gene's expression is restricted to epithelia with its highest expression in the epidermis, and oro-pharyngeal and gastro-intestinal tracts. The protein encoded by this gene binds non-muscle actin filaments. The role this gene may play in the etiology of premature ovarian failure remains to be determined. [provided by RefSeq, Jan 2010]

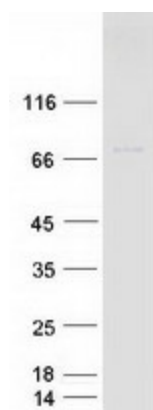
Product images:



Circular map for RC212627



Western blot validation of overexpression lysate (Cat# [LY403038]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212627 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified POF1B protein (Cat# [TP312627]). The protein was produced from HEK293T cells transfected with POF1B cDNA clone (Cat# RC212627) using MegaTran 2.0 (Cat# [TT210002]).