

## Product datasheet for **RC210974**

### VEPH1 (NM\_024621) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	VEPH1 (NM_024621) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VEPH1
Synonyms:	MELT; VEPH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC210974 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCATCAACTGTTCAGACTGGTTTTGGGACAAAAAGATCTTTACAGAGCTGGGACCTCTTCTCCTTAG  
 ATGACTCTGAGATTGAAGACAGCCTTACAGAAGCTTTGGAGCAAATTAAGATAATTAGCTCATCTTCAGA  
 TTACCAAACCAATAACAATGACCAGGCAGTAGTTGAAATCTGTATCACAAGAATCACAACAGCCATCAGA  
 GAGACCGAGTCCATTGAAAAGCATGCAAAGGCCCTTGTGGGGCTCTGGGACTCCTGCTTGGAACATAACC  
 TGAGACCCCTTTGGGAAAGACGAAGACACTCCTCATGCAAAAATCGCATCTGATATCATGAGTTGCATTTT  
 ACAGAATTACAACCGACCCCAAGTATGCTAACTACCTGTCTCTGGCTGCAATTACCAAGGCAGATCTCCTGG  
 AACAAGGAACTGTGCAGGAATATGTCTAACTACCTGTCTCTGGCTGCAATTACCAAGGCAGATCTCCTGG  
 CTGATCACACGGAAGTTATAGTAAAGAGCATACTCCAAGGTAACACCATGTTGTTGAGAGTGTACCTGC  
 TGTGTATGAAAAGCAGCCTCAGCCAATTAATAGACACCTGACAGAACTCCTGGCCTTGATGTCTCAGCTG  
 GAACAGCCAGAACAGTACCATCTACTACGGCTTTTGCATGTAGCAGCAAAGAAAAACAACCTCGAGGTAG  
 TTCAGAAGTGTATTCCTTCTAATTGGGCATTTGAAGGATTCAACCCATAATGACATCATCCTAAACAT  
 CCTCATAGAGATAGCAGTCTATGAGCCAGTGGCTTTGAACAGTTTTCTTCCAATGCTGAAAGAGATTGGT  
 GAGAGATCCCCTACCTCACTGGACAGATGGCAAGGATTTATGGAGCTGTTGGGCATGTGGATGAAGAGA  
 GAGCCAGGAGCTGCCTGACATACCTGGTGGCAACTGGCCAACATGGAGCATTGTTTACCATATTCT  
 CCTGCTGGAGATTAAGCATCACCGACACCTTCTCCTCAATCTTGGCCCTCAGAGCAGAGACATCTTC  
 CGCATGAGCAACAGCTTACCGCCATTGCTAACTCCTTACCCGACAACCTGAAAAATACCAAGGCTGAA  
 GTGGCAGGAGAAAAATCAGCACTGAAATTTGAATTCCTGAGAACTGGAAGAAACCAAGCTCATAGTAA  
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 AAGCTGCCGTTTAAAGACAGACTGAGAGATCACAGCTGGGGAGTCTTCAGTTTCATACCCAAATATTA  
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 TGCAAGTCTATAGAATACCAAGATAAGCTCTACTTGCCTTAAAAAAAACCTCAGCAAAGTGAAGCA  
 TATGCCATGGAATTTGAAAGAAGATCCAGTCCCTGATCAGTGTACCATTGAAGACACTGTGAGAAGTT  
 GTGTAGCAAAGTTGTTTTCACCTGCTCCTGAAGGGTCACTACTGCCTATACAGTAAGTCCAGTTTTAT  
 TCTCATCAGCAAGAACCTCAGCCATGGATCCAGATCATGTTTCTATTTCCAGCAGAGCCTGTTTCTGAA  
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 AGTTGCCCAAGCCAAAGAAAGGAAAGTGAAGAAGTAACACATATCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC210974 protein sequence  
Red=Cloning site Green=Tags(s)

MHQLFRLVLGQKDL SRAGDLFSLDDSEIEDSLTEALEQIKIISSSSDYQTNNDQAVVEICITRITTAIR  
ETESIEKHAKALVGLWDSLEHNL RPF GKDEDPHAKIASDIMSCILQYNRPPVMALAPIAVKFLHRG  
NKELCRNMSNYLSLAAITKADLLADHTEVIVKSILQGNTMLLRVLPAYVEKQPQPINRHLELLALMSQL  
EQPEQYHLLRLLHVAAKKKQLEVVQKCI PFLIGHLKDSTHNDIILNILEIAVYEPVALNSFLPMLKEIG  
ERFPYLTQMARIYGAVGHVDEERARSCLTYLVSQLANMEHSFHHILLLEIKSITDTFSSILGPQSRDIF  
RMSNSFTAIAKLLTRQLENTKAGSGRRKISTEIEFPEKLEETKLI VTENEDHEKLQVKIQAFEDKINAGS  
NTPGSIRRYSLGQVSKEERKNIRFNRSKSLAFHTMLTKGVGSDDGEDENRGDIPASISLSEIDPLGQGN  
KLPFKTDTERSQLGESSVSYPNIIHIDSENLPETVKENSQEETPETTASPIEYQDKLYLHLKKNLSKVKA  
YAMEIGKKIPVPDQCTIEDTVRSCVAKLFFTC SLKGHYCLYSKSSFILISQEPQPIQIMFLFQQSLFPE  
PLSIQSHSVQFLRALWEKTQAGGAHSFETAMMESTFPQQKDL DQVQLHLEEVRFDFVGFSETAGAWQCF  
MCNNPEKATVVNQDQPLIEGKLEKQVRWKF IKRWKTRYFTLAGNQLLFQK GKSKDDPDDCPIELSKVQ  
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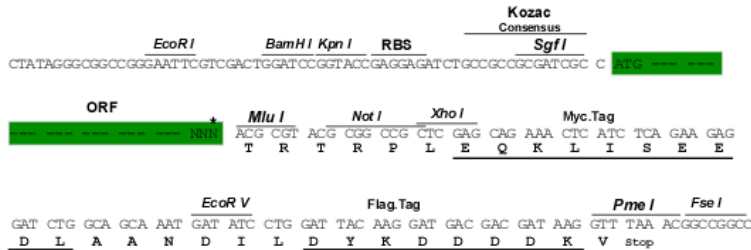
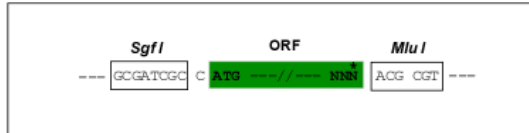
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6201\\_d03.zip](https://cdn.origene.com/chromatograms/mk6201_d03.zip)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_024621

**ORF Size:** 2499 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_024621.2](#)

**RefSeq Size:** 4313 bp

**RefSeq ORF:** 2502 bp

**Locus ID:** 79674

**UniProt ID:** [Q14D04](#)

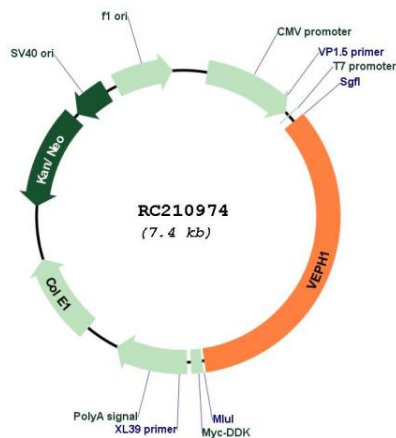
**Cytogenetics:** 3q25.31-q25.32

**Domains:** PH

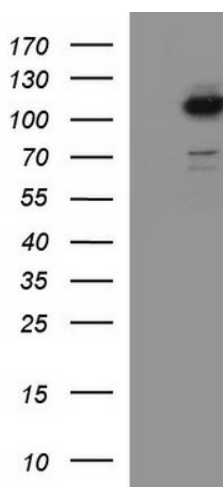
**MW:** 94.8 kDa

**Gene Summary:** Interacts with TGF-beta receptor type-1 (TGFBR1) and inhibits dissociation of activated SMAD2 from TGFBR1, impeding its nuclear accumulation and resulting in impaired TGF-beta signaling. May also affect FOXO, Hippo and Wnt signaling.[UniProtKB/Swiss-Prot Function]

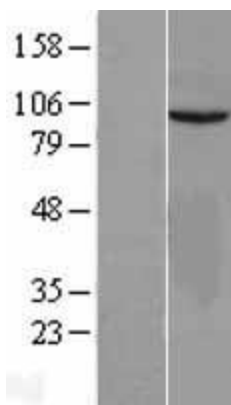
### Product images:



Circular map for RC210974



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY VEPH1 (Cat# RC210974, 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-VEPH1 (Cat# [TA590277]). Positive lysates [LY403012] (100ug) and [LC403012] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403012]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210974 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).