

Product datasheet for RC216151

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Von Hippel Lindau (VHL) (NM_000551) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Von Hippel Lindau (VHL) (NM_000551) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Von Hippel Lindau

Synonyms: HRCA1; pVHL; RCA1; VHL1

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC216151 representing NM_000551

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC216151 representing NM_000551

Red=Cloning site Green=Tags(s)

MPRRAENWDEAEVGAEEAGVEEYGPEEDGGEESGAEESGPEESGPEELGAEEEMEAGRPRPVLRSVNSRE PSQVIFCNRSPRVVLPVWLNFDGEPQPYPTLPPGTGRRIHSYRGHLWLFRDAGTHDGLLVNQTELFVPSL NVDGQPIFANITLPVYTLKERCLQVVRSLVKPENYRRLDIVRSLYEDLEDHPNVQKDLERLTQERIAHQR MGD

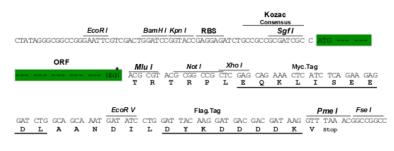
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6037 f07.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_000551

ORF Size: 639 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: <u>NM 000551.4</u>

 RefSeq Size:
 2968 bp

 RefSeq ORF:
 642 bp

 Locus ID:
 7428

 UniProt ID:
 P40337

 Cytogenetics:
 3p25.3

 Domains:
 VHL

Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Pathways in cancer, Renal cell carcinoma, Ubiquitin mediated proteolysis

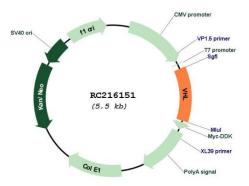
MW: 24 kDa

Gene Summary: Von Hippel-Lindau syndrome (VHL) is a dominantly inherited familial cancer syndrome

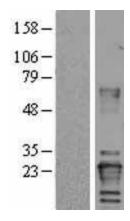
predisposing to a variety of malignant and benign tumors. A germline mutation of this gene is the basis of familial inheritance of VHL syndrome. The protein encoded by this gene is a component of the protein complex that includes elongin B, elongin C, and cullin-2, and possesses ubiquitin ligase E3 activity. This protein is involved in the ubiquitination and degradation of hypoxia-inducible-factor (HIF), which is a transcription factor that plays a central role in the regulation of gene expression by oxygen. RNA polymerase II subunit POLR2G/RPB7 is also reported to be a target of this protein. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]



Product images:

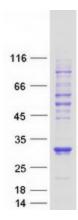


Circular map for RC216151



Western blot validation of overexpression lysate (Cat# [LY400188]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216151 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified VHL protein (Cat# [TP316151]). The protein was produced from HEK293T cells transfected with VHL cDNA clone (Cat# RC216151) using MegaTran 2.0 (Cat# [TT210002]).