

Product datasheet for **RG208875**

Von Hippel Lindau (VHL) (NM_198156) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Von Hippel Lindau (VHL) (NM_198156) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: VHL
Synonyms: HRCA1; pVHL; RCA1; VHL1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG208875 representing NM_198156
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCGGAGGGCGGAGAACTGGGACGAGGCCGAGGTAGGCGCGGAGGAGGCAGGCGTGAAGAGTACG
GCCCTGAAGAAGACGGCGGGGAGGAGTCCGGCCCGAGGAGTCCGGCCCGAAGAGTCCGGCCCGGAGGA
ACTGGGCGCCGAGGAGGAGATGGAGGCCGGCGCGCCCGCCCGTCTGCTGCTCGGTGAAGTCCGCGGAG
CCCTCCAGGTCACTTCTGCAATCGCAGTCCGCGCGTCTGCTGCCCGTATGGCTCAACTTCGACGGCG
AGCCGCAGCCCTACCAACGCTGCCGCTGGCACGGGCCCGCCATCTACAGCTACCGAGTGTATACTCT
GAAAGAGCGATGCCTCCAGGTTGTCCGGAGCCTAGTCAAGCCTGAGAATTACAGGAGACTGGACATCGTC
AGGTGCTCTACGAAGATCTGGAAGACCACCAATGTGCAGAAAGACCTGGAGCGGCTGACACAGGAGC
GCATTGCACATCAACGGATGGGAGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG208875 representing NM_198156
Red=Cloning site Green=Tags(s)

MPRAENWDEAEVGAEEAGVEEYGPEEDGGEEESGAEESGPEESGPEELGAEEMEAGRPRPVLRSVNSRE
PSQVIFCNRSPRVLPVWLNFDGEPQPYPTLPPGTGRRIYSYRVYTLKERCLQVVRSLVKPENYRRLDIV
RSLYEDLEDHPNVQKDLERLTQERIAHQRMGD

TRTRPLE - GFP Tag - V

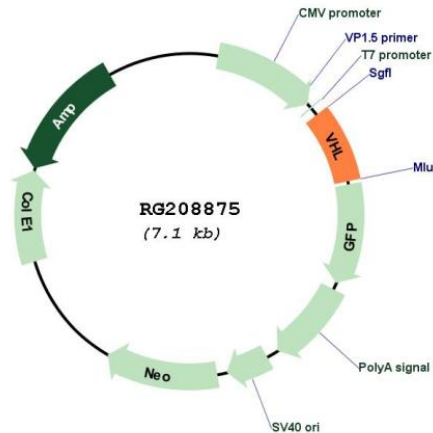
Restriction Sites: Sgfl-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_198156

ORF Size: 516 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:	<ol style="list-style-type: none">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:	<u>NM_198156.1, NP_937799.1</u>
RefSeq Size:	2845 bp
RefSeq ORF:	519 bp
Locus ID:	7428
UniProt ID:	<u>P40337</u>
Cytogenetics:	3p25.3
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Pathways in cancer, Renal cell carcinoma, Ubiquitin mediated proteolysis
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]