

## Product datasheet for **RG216151**

### 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:	TurboGFP
Symbol:	Von Hippel Lindau
Synonyms:	HRCA1; pVHL; RCA1; VHL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216151 representing NM_000551 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCCGGAGGGCGGAGAACTGGGACGAGGCCGAGGTAGGCGCGGAGGAGGCAGGCGTCGAAGAGTACG  
GCCCTGAAGAAGACGGCGGGGAGGAGTCGGGCGCCGAGGAGTCCGGCCCGAAGAGTCCGGCCCGGAGGA  
ACTGGGCGCCGAGGAGGAGATGGAGGCCGGCGCCGCGCCCGTGTGCGCTCGGTGAACCTCGCGCGAG  
CCCTCCAGGTCATCTTCTGCAATCGCAGTCCGCGGTCTGTGCTGCCGTATGGTCAACTTCGACGGCG  
AGCCGCAGCCCTACCCAACGCTGCCGCTGGCACGGGCCCGCATCCACAGCTACCGAGGTCACCTTTG  
GCTCTTCAGAGATGCAGGACACACGATGGGCTTCTGGTTAACCAAACTGAATTATTTGTGCCATCTCTC  
AATGTTGACGGACAGCCTATTTTGGCAATATCACACTGCCAGTGTATACTCTGAAAGAGCGATGCCTCC  
AGGTTGTCCGGAGCCTAGTCAAGCCTGAGAATTACAGGAGACTGGACATCGTCAGGTCGCTCTACGAAGA  
TCTGGAAGACCACCAAATGTGCAGAAAGACCTGGAGCGGCTGACACAGGAGCGCATTGCACATCAACGG  
ATGGGAGAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG216151 representing NM\_000551  
 Red=Cloning site Green=Tags(s)

MPRRAENWDEAEVGAAEAGVEEYGPPEEDGGEEESGAEESGPPEESGPEELGAEEMEAGRPRPVLRSVNSRE  
 PSQVIFCNRSRVLVWLNFDGEPQPYPTLPPGTGRRISHYRGHLWFRDAGTHDGLLVNQTELFPVPSL  
 NVDGQPIFANITLPPVYTLKERCLQVVRSLVKPENYRRLDIVRSLYEDLEDHPNVQKDLERLTQERIAHQ  
 R MGD

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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.

**RefSeq:** [NM\\_000551.4](#)

**RefSeq Size:** 2968 bp

**RefSeq ORF:** 642 bp

**Locus ID:** 7428

**UniProt ID:** [P40337](#)

**Cytogenetics:** 3p25.3

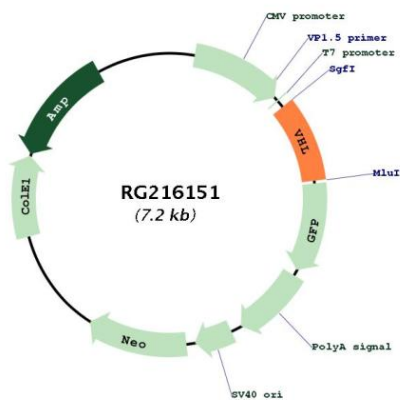
**Domains:** VHL

**Protein Families:** Druggable Genome, Transcription Factors

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

**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 RG216151