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VHL Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP6549a

Specification

VHL Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P40337

VHL Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 7428

Other Names
Von Hippel-Lindau disease tumor suppressor, Protein G7, pVHL, VHL

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6549a was selected from the N-term region of human VHL. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

VHL Antibody (N-term) Blocking Peptide - Protein Information

Name VHL

Function
Involved in the ubiquitination and subsequent proteasomal degradation via the von Hippel-Lindau ubiquitination complex (PubMed:10944113, PubMed:17981124, PubMed:19584355). Seems to act as a target recruitment subunit in the E3 ubiquitin ligase complex and recruits hydroxylated hypoxia-inducible factor (HIF) under normoxic conditions (PubMed:10944113, PubMed:17981124). Involved in transcriptional repression through interaction with HIF1A, HIF1AN and histone deacetylases (PubMed:10944113, PubMed:17981124). Ubiquitinates, in an oxygen-responsive manner, ADRB2

(PubMed:19584355). Acts as a negative regulator of mTORC1 by promoting ubiquitination and degradation of RPTOR (PubMed:34290272).

Cellular Location
[Isoform 1]: Cytoplasm. Cell membrane; Peripheral membrane protein. Endoplasmic reticulum. Nucleus. Note=Found predominantly in the cytoplasm and with less amounts nuclear or membrane-associated (PubMed:9751722) Colocalizes with ADRB2 at the cell membrane (PubMed:19584355)

Tissue Location
Expressed in the adult and fetal brain and kidney.

VHL Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

VHL Antibody (N-term) Blocking Peptide - Images

VHL Antibody (N-term) Blocking Peptide - Background

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 VHL gene is the basis of familial inheritance of VHL syndrome. The protein 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.

VHL Antibody (N-term) Blocking Peptide - References

Olmos,G., Cell. Mol. Life Sci. 66 (13), 2167-2180 (2009)Hatzimichael,E., Clin Lymphoma Myeloma 9 (3), 239-242 (2009)Luu,V.D., Clin. Cancer Res. 15 (10), 3297-3304 (2009)