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VHL Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6549B

Specification

VHL Antibody (C-term) - Product Information

Application	**IHC-P, FC, WB,E**
Primary Accession	P40337
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**24153**
Antigen Region	**181-210**

VHL Antibody (C-term) - Additional Information

Gene ID 7428

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

Target/Specificity
This VHL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 181-210 amino acids from the C-terminal region of human VHL.

Dilution
IHC-P~~1:50~100
FC~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
VHL Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

VHL Antibody (C-term) - 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)

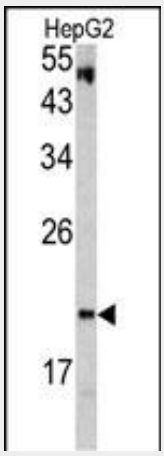
Tissue Location
Expressed in the adult and fetal brain and kidney.

VHL Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

VHL Antibody (C-term) - Images



Western blot analysis of VHL antibody (C-term) (Cat. #AP6549b) in HepG2 cell line lysates (35ug/lane). VHL (arrow) was detected using the purified Pab.

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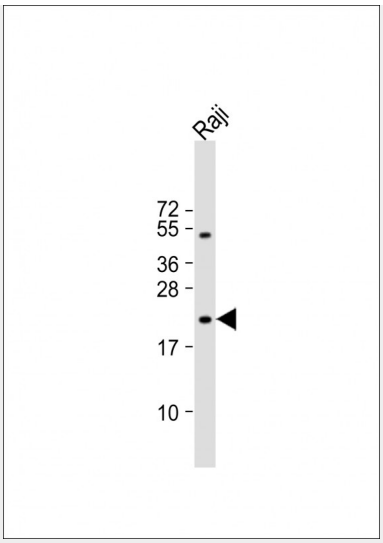
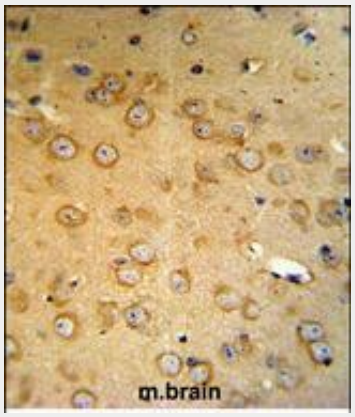
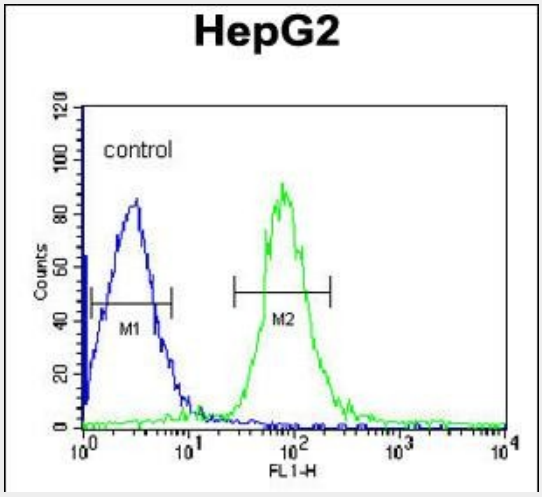


Anti-VHL Antibody (C-term) at 1:1000 dilution + Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 24 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



VHL Antibody (C-term) (RB18668) IHC analysis in formalin fixed and paraffin embedded mouse brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the VHL Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



VHL Antibody (C-term) (Cat. #AP6549b) flow cytometric analysis of HepG2 cells (right histogram)

compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

VHL Antibody (C-term) - 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 (C-term) - 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)

VHL Antibody (C-term) - Citations

- Salidroside accelerates fracture healing through cell-autonomous and non-autonomous effects on osteoblasts.
- Protective effect of salidroside against bone loss via hypoxia-inducible factor-1α pathway-induced angiogenesis.