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Goat Anti-VHL Antibody

Peptide-affinity purified goat antibody
Catalog # AF2146a

Specification

Goat Anti-VHL Antibody - Product Information

Application	**WB, E, EIA**
Primary Accession	P40337
Other Accession	NP_937799, 7428, 22346 (mouse), 24874 (rat)
Reactivity	**Human, Mouse, Rat**
Predicted	**Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**24153**

Goat Anti-VHL Antibody - Additional Information

Gene ID 7428

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

Dilution
WB~~1:1000
E~~N/A
EIA~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-VHL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-VHL Antibody - 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.

Goat Anti-VHL Antibody - 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

Goat Anti-VHL Antibody - Images

AF2146a (0.01 µg/ml) staining of Human Ovary lysate (35 µg protein in RIPA buffer). Primary

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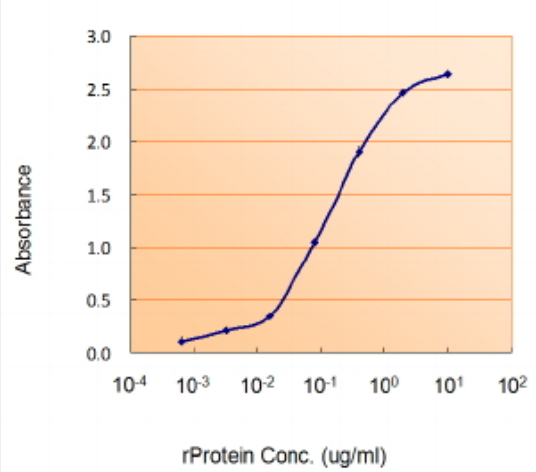
incubation was 1 hour. Detected by chemiluminescence.



AF2146a (1.5ug/ml) as the reporter with EB002014 as the capture rabbit antibody (2.5ug/ml).

Goat Anti-VHL Antibody - 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 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.

Goat Anti-VHL Antibody - References

Biomarkers Predicting Outcome in Patients with Advanced Renal Cell Carcinoma: Results from Sorafenib Phase III Treatment Approaches in Renal Cancer Global Evaluation Trial. Pe□a C, et al. Clin Cancer Res, 2010 Sep 14. PMID 20651059. Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000. Clinical and molecular features of familial and sporadic cases of von Hippel-Lindau disease from Mexico. Chacon-Camacho OF, et al. Clin Experiment Ophthalmol, 2010 Apr. PMID 20447124. VHL-gene deletion in single renal tubular epithelial cells and renal tubular cysts: further evidence for a cyst-dependent progression pathway of clear cell renal carcinoma in von Hippel-Lindau disease. Montani M, et al. Am J Surg Pathol, 2010 Jun. PMID 20431476.