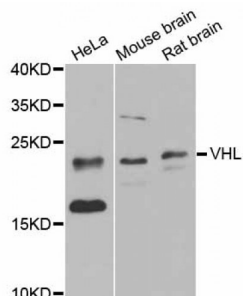


Von Hippel-Lindau Disease Tumor Suppressor (VHL) Antibody

Catalogue No.: abx000699



Western blot analysis of extracts of various cell lines, using VHL antibody (abx000699) at 1/1000 dilution.

VHL Antibody is a Rabbit Polyclonal antibody against VHL. The Von Hippel-Lindau (VHL) protein is a substrate recognition component of an E3 ubiquitin ligase complex containing elongin BC (TCEB1 and TCEB2), cullin 1 (CUL1), and RING-box protein 1 (RBX1) (1,2,3). VHL protein has been shown to exist as three distinct isoforms resulting from alternatively spliced transcript variants (4). Loss of VHL protein function results in a dominantly inherited familial cancer syndrome that manifests as angiomas of the retina, hemangioblastomas of the central nervous system, renal clear-cell carcinomas and pheochromocytomas (4). Under normoxic conditions, VHL directs the ubiquitylation and subsequent proteosomal degradation of the hypoxia inducible factor HIF alpha, maintaining very low levels of HIF alpha in the cell. Cellular exposure to hypoxic conditions, or loss of VHL protein function, results in increased HIF alpha protein levels and increased expression of HIF-induced gene products, many of which are angiogenesis factors such as vascular endothelial growth factor (VEGF). Thus, loss of VHL protein function is believed to contribute to the formation of highly vascular neoplasias (4). In addition to HIF alpha, VHL is known to regulate the ubiquitylation of several other proteins, including tat-binding protein 1 (TBP-1), the atypical protein kinase C lambda (aPKC), and two subunits of the multiprotein RNA Polymerase II complex (RPB1 and RPB7) (5,6,7,8). Interactions with elongin BC, RPB1, RPB7 and the pVHL-associated KRAB-A domain containing protein (VHLAK) suggest that VHL may also play a more direct role in transcriptional repression.

Target:	VHL
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Tested Applications:	WB

Recommended dilutions: WB: 1/500 - 1/2000. Optimal dilutions/concentrations should be determined by the end user.

Immunogen:	Recombinant protein of human VHL.
Purification:	Affinity purified.
Form:	Liquid

Abbexa Ltd, Innovation Centre, Cambridge Science Park, Cambridge, CB4 0EY, UK
Telephone: +44 (0) 1223 755950 - Fax: +44 (0) 1223 755951 - E-Mail: info@abbexa.com

Isotype:	IgG
Conjugation:	Unconjugated
Storage:	Aliquot and store at -20 °C. Avoid repeated freeze/thaw cycles.
Molecular Weight:	Calculated MW: 18 kDa/19 kDa/24 kDa Observed MW: 23 kDa
Swiss Prot:	P40337
GeneID:	7428
Gene Symbol:	VHL
Concentration:	> 1 mg/ml
Buffer:	PBS, pH 7.3, 0.02% sodium azide, 50% glycerol.
Note:	This product is for research use only.