

Product datasheet

Anti-Von Hippel Lindau/VHL antibody [OT1E1] ab140989

[12 References](#) [8 Images](#)

Overview

Product name	Anti-Von Hippel Lindau/VHL antibody [OT1E1]
Description	Mouse monoclonal [OT1E1] to Von Hippel Lindau/VHL
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein corresponding to Human Von Hippel Lindau/VHL aa 1-213. Produced in HEK-293T cells (NP_000542). Sequence: MPRRAENWDEAEVGAAEAGVEEYGPPEEDGGEEESGAEE SGPEESGPEELGA EEEMEAGRPRPVLRSVNSREPSQVIFCNRSPRVVLPVWL NFDGEPQPYPT LPPGTGRRIHSYRGHLWLF RDAGTHDGLLVNQT ELFVPSL NVDGQPIFAN ITLPVYTLKERCLQVVRSLVKPENYRRLDIVRSLYEDLEDH PNVQKDLERLTQERIAHQRMGD

Database link: [P40337](#)

 [Run BLAST with](#)

 [Run BLAST with](#)

Positive control	WB: Recombinant Human Von Hippel Lindau/VHL protein (ab82240), HEK-293T cell lysate transfected with pCMV6-ENTRY Von Hippel Lindau/VHL cDNA. IHC-P: Human colon carcinoma, ovary adenocarcinoma, pancreas, endometrium adenocarcinoma, lung carcinoma, endometrium and bladder tissue.
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General notes Clone OT1E1 (formerly 1E1).

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA, 50% Glycerol
Purity	Affinity purified
Purification notes	Purified from cell culture supernatant.
Clonality	Monoclonal
Clone number	OT1E1
Isotype	IgG2b

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab140989 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/4000. Predicted molecular weight: 24 kDa.
IHC-P		1/150. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function	Involved in the ubiquitination and subsequent proteasomal degradation via the von Hippel-Lindau ubiquitination complex. Seems to act as target recruitment subunit in the E3 ubiquitin ligase complex and recruits hydroxylated hypoxia-inducible factor (HIF) under normoxic conditions. Involved in transcriptional repression through interaction with HIF1A, HIF1AN and histone deacetylases.
Tissue specificity	Expressed in the adult and fetal brain and kidney.
Pathway	Protein modification; protein ubiquitination.
Involvement in disease	Defects in VHL are a cause of susceptibility to pheochromocytoma (PCC) [MIM:171300]. A catecholamine-producing tumor of chromaffin tissue of the adrenal medulla or sympathetic paraganglia. The cardinal symptom, reflecting the increased secretion of epinephrine and norepinephrine, is hypertension, which may be persistent or intermittent. Defects in VHL are the cause of von Hippel-Lindau disease (VHLD) [MIM:193300]. VHLD is a dominantly inherited familial cancer syndrome characterized by the development of retinal angiomas, cerebellar and spinal hemangioblastoma, renal cell carcinoma (RCC), pheochromocytoma and pancreatic tumors. VHL type 1 is without pheochromocytoma, type 2 is with pheochromocytoma. VHL type 2 is further subdivided into types 2A (pheochromocytoma, retinal angioma, and hemangioblastomas without renal cell carcinoma and pancreatic cyst) and 2B (pheochromocytoma, retinal angioma, and hemangioblastomas with renal cell carcinoma and

pancreatic cyst). VHL type 2C refers to patients with isolated pheochromocytoma without hemangioblastoma or renal cell carcinoma. The estimated incidence is 3/100000 births per year and penetrance is 97% by age 60 years.

Defects in VHL are the cause of erythrocytosis familial type 2 (ECYT2) [MIM:263400]; also called VHL-dependent polycythemia or Chuvash type polycythemia. ECYT2 is an autosomal recessive disorder characterized by an increase in serum red blood cell mass, hypersensitivity of erythroid progenitors to erythropoietin, increased erythropoietin serum levels, and normal oxygen affinity. Patients with ECYT2 carry a high risk for peripheral thrombosis and cerebrovascular events.

Defects in VHL are a cause of renal cell carcinoma (RCC) [MIM:144700]. Renal cell carcinoma is a heterogeneous group of sporadic or hereditary carcinoma derived from cells of the proximal renal tubular epithelium. It is subclassified into clear cell renal carcinoma (non-papillary carcinoma), papillary renal cell carcinoma, chromophobe renal cell carcinoma, collecting duct carcinoma with medullary carcinoma of the kidney, and unclassified renal cell carcinoma.

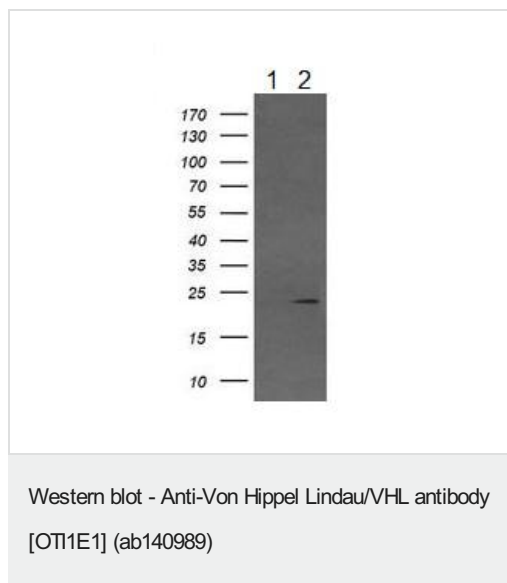
Domain

The Elongin BC complex binding domain is also known as BC-box with the consensus [APST]-L-x(3)-C-x(3)-[AILV].

Cellular localization

Cytoplasm. Membrane. Nucleus. Found predominantly in the cytoplasm and with less amounts nuclear or membrane-associated and Cytoplasm. Nucleus. Equally distributed between the nucleus and the cytoplasm but not membrane-associated.

Images



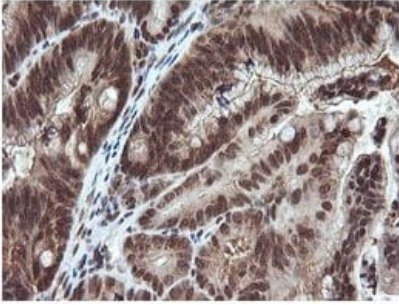
All lanes : Anti-Von Hippel Lindau/VHL antibody [OT11E1] (ab140989) at 1/4000 dilution

Lane 1 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate transfected with pCMV6-ENTRY control cDNA

Lane 2 : HEK-293T cell lysate transfected with pCMV6-ENTRY Von Hippel Lindau cDNA

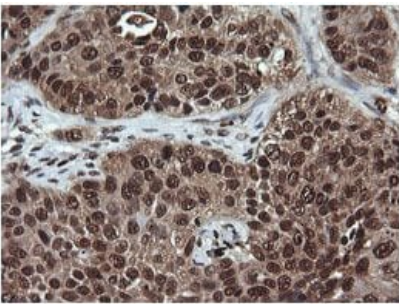
Lysates/proteins at 5 µg per lane.

Predicted band size: 24 kDa



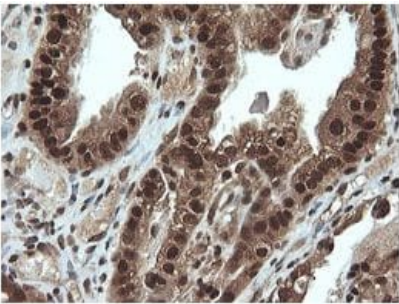
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Von Hippel Lindau/VHL antibody [OT11E1] (ab140989)

Paraffin-embedded human colon adenocarcinoma tissue stained for Von Hippel Lindau/VHL using ab140989 at 1/150 dilution in immunohistochemical analysis.



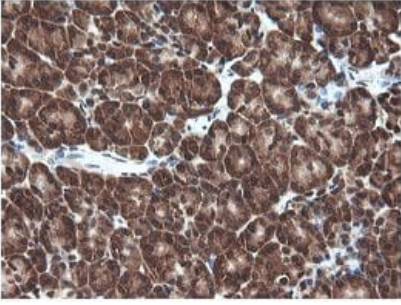
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Von Hippel Lindau/VHL antibody [OT11E1] (ab140989)

Paraffin-embedded human lung carcinoma tissue stained for Von Hippel Lindau/VHL using ab140989 at 1/150 dilution in immunohistochemical analysis.



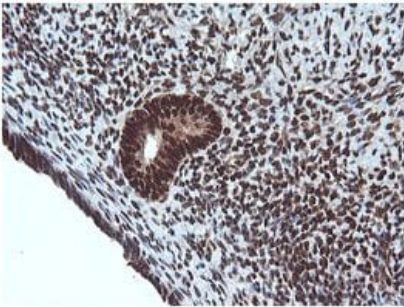
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Von Hippel Lindau/VHL antibody [OT11E1] (ab140989)

Paraffin-embedded human ovary adenocarcinoma tissue stained for Von Hippel Lindau/VHL using ab140989 at 1/150 dilution in immunohistochemical analysis.



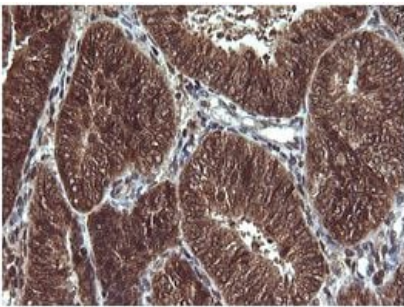
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Von Hippel Lindau/VHL antibody [OT11E1] (ab140989)

Paraffin-embedded human pancreas tissue stained for Von Hippel Lindau/VHL using ab140989 at 1/150 dilution in immunohistochemical analysis.



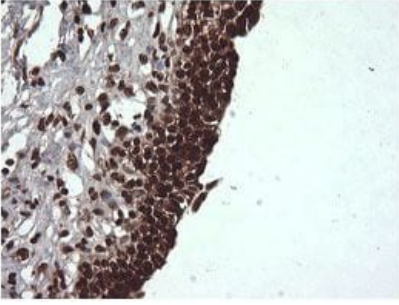
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Von Hippel Lindau/VHL antibody [OT11E1] (ab140989)

Paraffin-embedded human endometrium tissue stained for Von Hippel Lindau/VHL using ab140989 at 1/150 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Von Hippel Lindau/VHL antibody [OT11E1] (ab140989)

Paraffin-embedded human endometrium adenocarcinoma tissue stained for Von Hippel Lindau/VHL using ab140989 at 1/150 dilution in immunohistochemical analysis.



Paraffin-embedded human bladder tissue stained for Von Hippel Lindau/VHL using ab140989 at 1/150 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Von Hippel Lindau/VHL antibody [OT1E1] (ab140989)

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