

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human VHL in direct ELISA.
Source	Monoclonal Mouse IgG _{2B} Clone # 1066408
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human VHL Asn150-Asp213 Accession # P40337
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

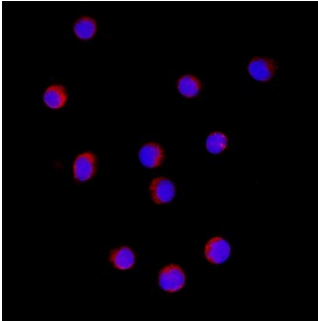
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	3-25 µg/mL	Formalin fixed Daudi human Burkitt's lymphoma cell line

DATA

Immunocytochemistry



Detection of VHL in Daudi Human Cell Line. VHL was detected in formalin fixed Daudi human Burkitt's lymphoma cell line using Mouse Anti-Human VHL Monoclonal Antibody (Catalog # MAB114352) at 8 µg/ml for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to the membrane. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

VHL (von Hippel-Lindau disease tumor suppressor) is the substrate recognition subunit for an E3 ligase activity that ubiquitinates proteins containing hydroxyproline residues. Targets of VHL include HIF1α, β2 adrenergic receptor, ZHX2 and others. In VHL-box E3 Ubiquitin ligases, VHL is bound to a heterodimer complex composed of Elongin B (ELOB) and Elongin C (ELOC) through the "BC-box motif" found in many proteins in the VHL-box and SOCS-box protein families. ELOB/ELOC serves as an adapter between substrate recognition proteins and Cullin-2 (or Cullin-5) and RBX1 to form an active E3 ligase.

References:

1. Kamura, T. *et al.* (1998) *Genes & Dev.* doi: 10.1101/gad.12.24.3872.
2. Okumura, F. *et al.* (2012) *Front. Oncol.* doi: 10.3389/fonc.2012.00010.
3. Xie, L. *et al.* (2009) *Sci. Signaling* doi: 10.1126/scisignal.2000444.
4. Zhang, J. *et al.* (2018) *Science* doi: 10.1126/science.aap8411.