

DESCRIPTION

Species Reactivity	Human
Specificity	Detects hElongin B/Elongin C/VHL/CUL2/RBX1 Complex in Direct ELISA
Source	Monoclonal Mouse IgG ₁ Clone # 1076415
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>Spodoptera frugiperda</i> , Sf 21 (baculovirus)-derived human VHL/ELOB/ELOC/CUL2/RBX1 Complex Accession # Q15369
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

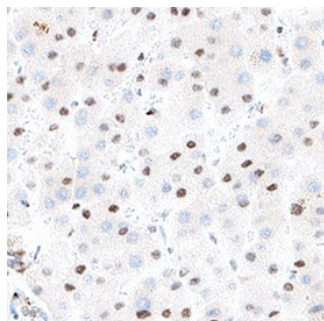
APPLICATIONS

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	fixed MCF-7 human breast cancer cell line
Immunohistochemistry	3-25 µg/mL	Immersion fixed paraffin-embedded sections of human liver

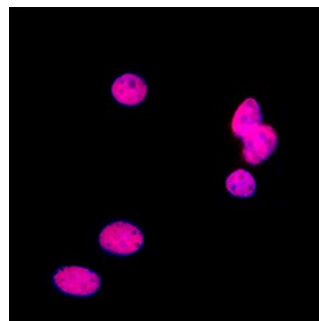
DATA

Immunocytochemistry



Detection of TCEB1 in Human Liver. TCEB1 was detected in immersion fixed paraffin-embedded sections of human liver using Mouse Anti-Human TCEB1 Monoclonal Antibody (Catalog # MAB11569) at 5 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001) or the HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the nucleus. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Immunohistochemistry



Detection of TCEB1 in MCF-7 Human Cell Line. TCEB1 was detected in fixed MCF-7 human breast cancer cell line using Mouse Anti-Human TCEB1 Monoclonal Antibody (Catalog # MAB11569) 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 nucleus. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute lyophilized material at 0.2mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. • 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

Elongin C is a 12kDa, 112aa general transcription elongation factor. Elongin C, along with Elongin B, Cul2 and Rbx1 to forms a complex with VHL, and Elongin C is required for the function of VHL. Mutations in Elongin C are responsible for 0.5% to 5% of clear cell renal cell carcinomas. Tumorigenic mutations frequently occur in a 35-residue domain of VHL responsible for Elongin C binding.

References:

1. Brugarolas J. Molecular genetics of clear-cell renal cell carcinoma. J Clin Oncol. 2014 Jun 20;32(18):1968-76. doi: 10.1200/JCO.2012.45.2003. Epub 2014 May 12. PMID: 24821879; PMCID: PMC4050206.
2. Stebbins CE, Kaelin WG Jr, Pavletich NP. Structure of the VHL-ElonginC-ElonginB complex: implications for VHL tumor suppressor function. Science. 1999 Apr 16;284(5413):455-61. doi: 10.1126/science.284.5413.455. PMID: 10205047.
3. Hakimi AA, Tickoo SK, Jacobsen A, Sarungbam J, Sfakianos JP, Sato Y, Morikawa T, Kume H, Fukayama M, Homma Y, Chen YB, Sankin A, Mano R, Coleman JA, Russo P, Ogawa S, Sander C, Hsieh JJ, Reuter VE. TCEB1-mutated renal cell carcinoma: a distinct genomic and morphological subtype. Mod Pathol. 2015 Jun;28(6):845-853. doi: 10.1038/modpathol.2015.6. Epub 2015 Feb 13. PMID: 25676555; PMCID: PMC4449825.