

**DESCRIPTION**

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects hElongin B/Elongin C/VHL/CUL2/RBX1 Complex in Direct ELISA  |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 1076415   |
| <b>Purification</b>       | Protein A or G purified   |
| <b>Immunogen</b>          | <i>Spodoptera frugiperda</i> , Sf 21 (baculovirus)-derived human VHL/ELOB/ELOC/CUL2/RBX1 Complex<br>Accession # Q15369  |
| <b>Conjugate</b>          | Alexa Fluor Plus 647<br>Excitation Wavelength: 658 nm<br>Emission Wavelength: 675 nm  |
| <b>Formulation</b>        | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide.<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

**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.

|                             |  |
|-----------------------------|--|
| <b>Immunocytochemistry</b>  | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

**DATA**

**PREPARATION AND STORAGE**

|                                |   |
|--------------------------------|---|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

**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.

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