

**KLH22 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP18159b****Specification**

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**KLH22 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q53GT1</a>
Other Accession	<a href="#">NP_116164.2</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	71667
Antigen Region	586-614

**KLH22 Antibody (C-term) - Additional Information****Gene ID** 84861**Other Names**

Kelch-like protein 22, KLHL22

**Target/Specificity**

This KLH22 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 586-614 amino acids from the C-terminal region of human KLH22.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

KLH22 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**KLH22 Antibody (C-term) - Protein Information****Name** KLHL22 ([HGNC:25888](#))**Function** Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex

required for chromosome alignment and localization of PLK1 at kinetochores. The BCR(KLHL22) ubiquitin ligase complex mediates monoubiquitination of PLK1, leading to PLK1 dissociation from phosphoreceptor proteins and subsequent removal from kinetochores, allowing silencing of the spindle assembly checkpoint (SAC) and chromosome segregation. Monoubiquitination of PLK1 does not lead to PLK1 degradation (PubMed:[19995937](#), PubMed:[23455478](#)). The BCR(KLHL22) ubiquitin ligase complex is also responsible for the amino acid-stimulated 'Lys-48' polyubiquitination and proteasomal degradation of DEPDC5. Through the degradation of DEPDC5, releases the GATOR1 complex-mediated inhibition of the TORC1 pathway. It is therefore an amino acid-dependent activator within the amino acid-sensing branch of the TORC1 pathway, indirectly regulating different cellular processes including cell growth and autophagy (PubMed:[29769719](#)).

#### Cellular Location

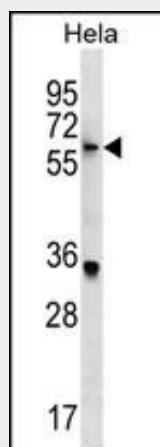
Cytoplasm, cytosol. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. Nucleus. Lysosome Note=Mainly cytoplasmic in prophase and prometaphase. Associates with the mitotic spindle as the cells reach chromosome bi-orientation. Localizes to the centrosomes shortly before cells enter anaphase. After anaphase onset, predominantly associates with the polar microtubules connecting the 2 opposing centrosomes and gradually diffuses into the cytoplasm during telophase (PubMed:[23455478](#)). Localizes to the nucleus upon amino acid starvation (PubMed:[29769719](#)). Relocalizes to the cytosol and associates with lysosomes when amino acids are available (PubMed:[29769719](#)).

#### KLH22 Antibody (C-term) - Protocols

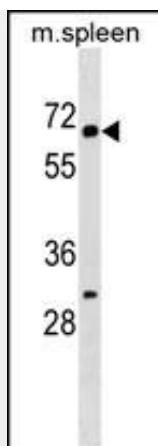
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### KLH22 Antibody (C-term) - Images



KLH22 Antibody (C-term) (Cat. #AP18159b) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the KLH22 antibody detected the KLH22 protein (arrow).



KLH22 Antibody (C-term) (Cat. #AP18159b) western blot analysis in mouse spleen tissue lysates (35ug/lane). This demonstrates the KLH22 antibody detected the KLH22 protein (arrow).

#### **KLH22 Antibody (C-term) - Background**

Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex required for cell division. BCR E3 ubiquitin ligase complexes mediate the ubiquitination of target proteins.

#### **KLH22 Antibody (C-term) - References**

Maerki, S., et al. J. Cell Biol. 187(6):791-800(2009)  
Collins, J.E., et al. Genome Biol. 5 (10), R84 (2004) :