

## KLH22 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18159b

### **Specification**

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

WB,E Application **Primary Accession** 053GT1 Other Accession NP 116164.2 Human, Mouse Reactivity 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

## **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 (<u>HGNC:25888</u>)

**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: 1995937, 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**

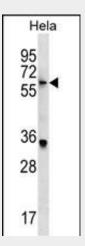
Cytoplasm, cytosol. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. Nucleus. Lysosome Note=Mainly cytoplasmic in prophase and prometaphase. Associates with the mitotic spindle as the cells reach chromosome bi-orientation Localizes to the centrosomes 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.

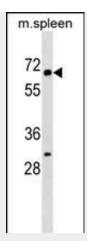
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture

## 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) :