

KLH22 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP18159b**Specification**

KLH22 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q53GT1](#)**KLH22 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 84861

Other Names

Kelch-like protein 22, KLHL22

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KLH22 Antibody (C-term) Blocking Peptide - Protein InformationName 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

KLH22 Antibody (C-term) Blocking Peptide - Images

KLH22 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - References

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