

## KLHL22 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58758

## Specification

# KLHL22 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype <b>Purity</b> affinity purified by Protein A	WB, IHC-P, IHC-F, IF, E <u>O53GT1</u> Rat, Bovine Rabbit Polyclonal 72 KDa Liquid KLH conjugated synthetic peptide derived from human KLHL22 151-250/634 IgG
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 BTB (POZ) domain.Contains 6 Kelch repeats.
SUBUNIT	Component of the BCR(KLHL22) E3 ubiquitin ligase complex,at least composed of CUL3, KLHL22 and RBX1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

### Background Descriptions

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.

## KLHL22 Polyclonal Antibody - Additional Information

Gene ID 84861

Other Names Kelch-like protein 22, KLHL22 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=25888" target="\_blank">HGNC:25888</a>)

Dilution <span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_E">E~~N/A</span>



Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## KLHL22 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/19995937" target="\_blank">19995937</a>, PubMed:<a href="http://www.uniprot.org/citations/23455478" target="\_blank">23455478</a>). 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, indirectly regulating different cellular processes including cell growth and autophagy (PubMed:<a href="http://www.uniprot.org/citations/29769719" target="\_blank">29769719</a>).

#### **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).

### **KLHL22 Polyclonal Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KLHL22 Polyclonal Antibody - Images





Paraformaldehyde-fixed, paraffin embedded (rat embryonic liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KLHL22) Polyclonal Antibody, Unconjugated (bs-7807R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KLHL22) Polyclonal Antibody, Unconjugated (bs-7807R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.