

KLHL12 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17327b**Specification**

KLHL12 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	Q53G59
Other Accession	Q6NRH0 , Q8R2H4 , Q8BZM0 , Q5U374 , E1B932 , NP_067646.1
Reactivity	Human, Mouse
Predicted	Bovine, Zebrafish, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	63277
Antigen Region	376-404

KLHL12 Antibody (C-term) - Additional Information**Gene ID** 59349**Other Names**

Kelch-like protein 12, CUL3-interacting protein 1, DKIR homolog, hDKIR, KLHL12, C3IP1

Target/Specificity

This KLHL12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 376-404 amino acids from the C-terminal region of human KLHL12.

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

KLHL12 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

KLHL12 Antibody (C-term) - Protein Information**Name** KLHL12

Synonyms C3IP1 {ECO:0000303|Ref.1}

Function Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that acts as a negative regulator of Wnt signaling pathway and ER-Golgi transport (PubMed:[22358839](#), PubMed:[27565346](#)). The BCR(KLHL12) complex is involved in ER-Golgi transport by regulating the size of COPII coats, thereby playing a key role in collagen export, which is required for embryonic stem (ES) cells division: BCR(KLHL12) acts by mediating monoubiquitination of SEC31 (SEC31A or SEC31B) (PubMed:[22358839](#), PubMed:[27565346](#)). The BCR(KLHL12) complex is also involved in neural crest specification: in response to cytosolic calcium increase, interacts with the heterodimer formed with PEF1 and PDCD6/ALG-2, leading to bridge together the BCR(KLHL12) complex and SEC31 (SEC31A or SEC31B), promoting monoubiquitination of SEC31 and subsequent collagen export (PubMed:[27716508](#)). As part of the BCR(KLHL12) complex, also acts as a negative regulator of the Wnt signaling pathway by mediating ubiquitination and subsequent proteolysis of DVL3 (PubMed:[16547521](#)). The BCR(KLHL12) complex also mediates polyubiquitination of DRD4 and PEF1, without leading to degradation of these proteins (PubMed:[18303015](#), PubMed:[20100572](#), PubMed:[27716508](#)).

Cellular Location

Cytoplasmic vesicle, COPII-coated vesicle

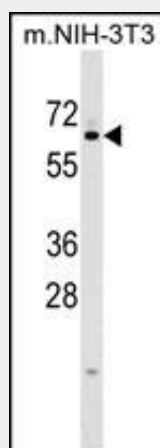
Tissue Location

Ubiquitously expressed. Highly expressed in testis and at lower levels in the submandibular salivary gland

KLHL12 Antibody (C-term) - Protocols

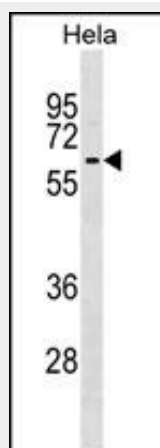
Provided below are standard protocols that you may find useful for product applications.

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

KLHL12 Antibody (C-term) - Images

KLHL12 Antibody (C-term) (Cat. #AP17327b) western blot analysis in mouse NIH-3T3 cell line

lysates (35ug/lane). This demonstrates the KLHL12 antibody detected the KLHL12 protein (arrow).



KLHL12 Antibody (C-term) (Cat. #AP17327b) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the KLHL12 antibody detected the KLHL12 protein (arrow).

KLHL12 Antibody (C-term) - Background

Serves as a substrate-specific adapter for the CUL3-based ubiquitin-protein E3 ligase complex. Negatively regulates the Wnt signaling pathway via the targeted ubiquitination and subsequent proteolysis of DVL3.

KLHL12 Antibody (C-term) - References

- Ehret, G.B., et al. Eur. J. Hum. Genet. 17(12):1650-1657(2009)
- Rondou, P., et al. J. Biol. Chem. 283(17):11083-11096(2008)
- Lim, J., et al. Cell 125(4):801-814(2006)
- Angers, S., et al. Nat. Cell Biol. 8(4):348-357(2006)
- Uchida, K., et al. Immunology 116(1):53-63(2005)