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C3IP1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55842

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q53G59
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63277
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human C3IP1
Epitope Specificity	1-100/568
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasmic vesicle, COPII-coated vesicle.
SIMILARITY	Contains 1 BACK (BTB/Kelch associated) domain. Contains 1 BTB (POZ) domain. Contains 6 Kelch repeats.
SUBUNIT	Component of the BCR(KLHL12) E3 ubiquitin ligase complex, at least composed of CUL3 and KLHL12 and RBX1. This complex interacts with DVL3 upon activation of the Wnt signaling pathway by WNT3A. Interacts with DRD4, KLHL12 and SEC31A.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	KLHL12 is a 568 amino acid protein that is a component of an ubiquitin-protein E3 ligase complex, which includes at least CUL-3. KLHL12 is a substrate-specific adapter for the complex, which negatively regulates the Wnt signaling pathway via the targeted ubiquitination and subsequent proteolysis of Dvl-3. KLHL12 contains six Kelch repeats and one BTB (POZ) domain, which is required for interaction with CUL-3. KLHL12 has highest expression in testis, with lower levels found in the submandibular salivary gland. The gene that encodes KLHL12 maps to human chromosome 1q32.1

Additional Information

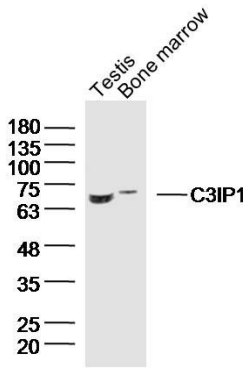
Gene ID	59349
Other Names	Kelch-like protein 12, CUL3-interacting protein 1 {ECO:0000303|Ref.1}, DKIR homolog, hDKIR, KLHL12, C3IP1 {ECO:0000303|Ref.1}
Target/Specificity	Ubiquitously expressed. Highly expressed in testis and at lower levels in the submandibular salivary gland.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

	0,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 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.

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

Images



Sample:
Testis (Mouse) Lysate at 40 ug
Bone marrow (Mouse) Lysate at 40 ug
Primary: Anti-C3IP1 (AP55842) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 63 kD
Observed band size: 65 kD