

C3IP1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55842

Specification

C3IP1 Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession
Reactivity
Rat, Pig, Dog
Host
Clonality
Polyclonal
Calculated MW
63 KDa

Physical State
Liquid
Immunogen
KLH conjugated synthetic peptide derived

from human C3IP1

Epitope Specificity 1-100/568

Isotype IgG
Purity

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

affinity purified by Protein A

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

C3IP1 Polyclonal Antibody - 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~~1:1000<br \><span class
="dilution_IHC-P">IHC-P~~N/A<br \><span class
="dilution_IHC-F">IHC-F~~N/A<br \><span class
="dilution_IF">IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

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.

C3IP1 Polyclonal Antibody - 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

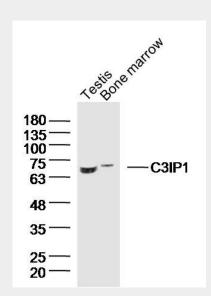
Ubiquitously expressed. Highly expressed in testis and at lower levels in the submandibular salivary gland

C3IP1 Polyclonal Antibody - Protocols

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

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

C3IP1 Polyclonal Antibody - Images



Sample:

Testis (Mouse) Lysate at 40 ug

Bone marrow (Mouse) Lysate at 40 ug

Primary: Anti-C3IP1 (bs-15164R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 63 kD Observed band size: 65 kD