### For Research Use Only

# CUL4B Polyclonal antibody

Catalog Number: 12916-1-AP

Featured Product

82 Publications



**Basic Information** 

Catalog Number: 12916-1-AP Concentration:

350 ug/ml Source: Rabbit Isotype:

Immunogen Catalog Number:

AG3563

GenBank Accession Number:

BC036216 GeneID (NCBI): 8450

**UNIPROT ID:** Q13620

Full Name: cullin 4B Calculated MW:

913 aa, 104 kDa Observed MW:

102 kDa

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:6000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IF/ICC 1:500-1:2000

**Applications** 

**Tested Applications:** WB, IF/ICC, IP, ELISA **Cited Applications:** WB, IHC, IF, IP, CoIP, RIP Species Specificity:

human, mouse **Cited Species:** 

human, mouse, rat, canine

Positive Controls:

WB: HEK-293 cells, HeLa cells

IP: HeLa cells. IF/ICC: HeLa cells,

## **Background Information**

Cullin-RING ligases (CRLs) complexes participate in the regulation of diverse cellular processes, including cell cycle progression, transcription, signal transduction and development (PMID: 21816341)(PMID: 21554755). Serving as the scaffold protein, cullins are crucial for the assembly of ligase complexes, which recognize and target various substrates for proteosomal degradation. Two cullin 4 (CUL4) proteins, CUL4A (87 kDa) and CUL4B(104 kDa), are two  $members in cull in family \ with 83\% \ of identity. \ Mutations in human CUL4B \ are one of the \ major \ causes \ of \ X-linked$  $mental\ retardation.\ Cul4b\ knockout\ mice\ demonstrated\ that\ CUL4B\ is\ in dispensable\ for\ embryonic\ development\ in$ the mouse (PMID: 22606329). This antibody may detect both CUL4A (87 kDa) and CUL4B(104 kDa).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Xu Zhang	36212422	Front Oncol	WB
Liu Helio C HC	22992378	BMC Neurosci	WB, IF
Fumei Chen	36056732	Gigascience	WB

Storage

Storage:

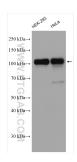
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

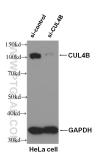
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

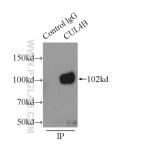
## **Selected Validation Data**



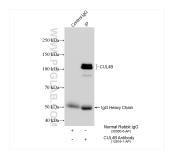
Various lysates were subjected to SDS PAGE followed by western blot with 12916-1-AP (CUL4B antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



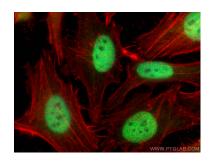
WB result of CUL4B antibody (12916-1-AP, 1:2,000) with si-Control and si-CUL4B transfected HeLa cells.



IP result of anti-CUL4B (IP:12916-1-AP, 3ug; Detection:12916-1-AP 1:1000) with HeLa cells lysate 4650ug.



IP result of anti-CUL4B (IP:12916-1-AP, 4ug; Detection:12916-1-AP 1:5000) with HeLa cells lysate 1280 ug.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CUL4B antibody (12916-1-AP) at dilution of 1:1500 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).