For Research Use Only

CUL7 Polyclonal antibody

Catalog Number:13738-1-AP Featured Product 3 Publications

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Basic Information

Catalog Number:
13738-1-AP

Size:
150ul , Concentration: 500 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4675

GenBank Accession Number:
BC033647

GeneID (NCBI):
9820

UNIPROT ID:
Q14999

Full Name:
cullin 7

Calculated MW:
1698 aa, 191 kDa

Observed MW:
185 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB

Species Specificity:
human

Cited Species:
human, rat

Positive Controls:

WB : HEK-293 cells,

Background Information

The cullin family proteins are scaffold proteins for the Ring finger type E3 ligases, participating in the proteolysis through the ubiquitin-proteasome pathway. Humans express seven cullin proeins: CUL1-3, CUL4A, CUL4B, CUL5, and CUL7. Each cullin protein can form an E3 ligase similar to the prototype Ring-type E3 ligase Skp1-CUL1-F-box complex. The Cullin-RING-finger type E3 ligases are important regulators in early embryonic development, as highlighted by genetic studies demonstrating that knock-out of CUL1, CUL3, or CUL4A in mice results in early embryonic lethality. CUL7 was originally discovered as 185-kDa protein associated with the large T antigen of simian virus 40 (SV40). CUL7-deficient mice exhibit neonatal lethality with reduced size and vascular defects. CUL7 presumably plays a role in the DNA damage response by limiting p53 activity. CUL7 mutations have also been identified in 3-Msyndrome and the Yakuts short stature syndrome, both of which are characterized by pre- and post-natal growth retardation but with relatively normal mental and endocrine functions, suggesting that CUL7 may also be crucial for human placental development.

Notable Publications

Author	Pubmed ID	Journal	Application
Tomoaki Nagai	30404837	J Cell Sci	WB
Gustavo R Ares	36727946	Am J Physiol Renal Physiol	WB
Zhang Wencheng W	23396401	Diabetes	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

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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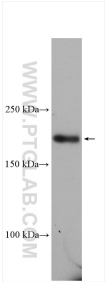
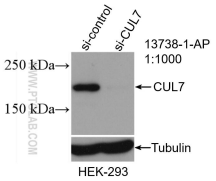
Selected Validation Data



HEK-293 cells were subjected to SDS PAGE followed by western blot with 13738-1-AP (CUL7 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



WB result of CUL7 antibody (13738-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CUL7 transfected HEK-293 cells.