For Research Use Only

## CUL7 Monoclonal antibody, PBS Only

Catalog Number: 67034-1-PBS

**Featured Product** 



**Purification Method:** 

CloneNo.:

2E3G9

Protein A purification

**Basic Information** 

Catalog Number:

67034-1-PBS

Size:

100ug, Concentration: 1 mg/ml by

Nanodrop:

Mouse Isotype:

Immunogen Catalog Number:

AG6943

IgG2a

GenBank Accession Number:

BC033647

GeneID (NCBI):

**UNIPROT ID:** Q14999

Full Name: cullin 7

Calculated MW:

1698 aa, 191 kDa

Observed MW: 185 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, Indirect ELISA

Species Specificity:

Human, Mouse, Rat

## **Background Information**

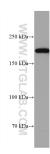
he cullin family proteins are scaffold proteins for the Ring finger type E3 ligases, participating in the proteolysis through the ubiquitin-proteasome pathway. Humans express seven cullin proeins: CUL1-3, CUL4A, CUL4B, CUL5, and CUL7. Each cullin protein can form an E3 ligase similar to the prototype 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 postnatal growth retardation but with relatively normal mental and endocrine functions, suggesting that CUL7 may also be crucial for human placental development.

Storage

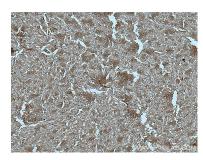
Store at -80°C.

Storage Buffer:

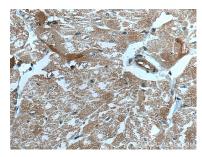
## **Selected Validation Data**



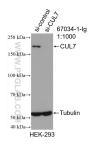
HEK-293 cells were subjected to SDS PAGE followed by western blot with 67034-1-lg (CUL7 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67034-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human heart tissue slide using 67034-1-Ig (CUL7 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67034-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human heart tissue slide using 67034-1-Ig (CUL7 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67034-1-PBS in a different storage buffer formulation.



WB result of CUL7 antibody (67034-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CUL7 transfected HEK-293 cells. This data was developed using the same antibody clone with 67034-1-PBS in a different storage buffer formulation.