

CUL1 Monoclonal antibody

Catalog Number: 66978-1-Ig

Basic Information

| | | |
|---|--|--|
| Catalog Number: 66978-1-Ig | GenBank Accession Number: BC034318 | Purification Method: Protein A purification |
| Size: 2700 µg/ml | GeneID (NCBI): 8454 | CloneNo.: 1B6D10 |
| Source: Mouse | UNIPROT ID: Q13616 | Recommended Dilutions: WB 1:2000-1:10000 IHC 1:500-1:2000 IF/ICC 1:200-1:800 |
| Isotype: IgG2b | Full Name: cullin 1 | |
| Immunogen Catalog Number: AG28399 | Calculated MW: 90 kDa Observed MW: 85 kDa | |

Applications

| | |
|--|---|
| Tested Applications: WB, IHC, IF/ICC, FC (Intra), ELISA | Positive Controls: WB : HEK-293 cells, NCI-H1299 cells, Jurkat cells, PC-12 cells, NIH/3T3 cells, 4T1 cells IHC : human lung cancer tissue, human prostate cancer tissue IF/ICC : HEK-293 cells, |
| Species Specificity: human, mouse, rat | |
| Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | |

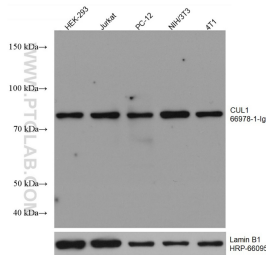
Background Information

The cullin family proteins are scaffold proteins for the Ring finger type E3 ligases. Humans express seven cullin proteins: 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.

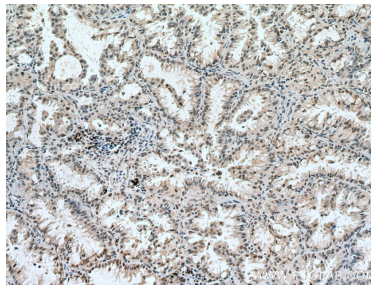
Storage

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

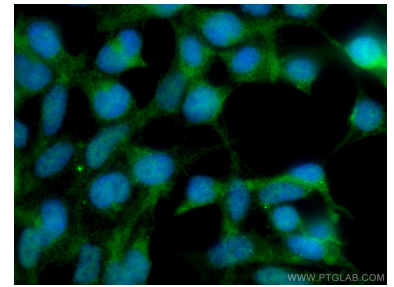
Selected Validation Data



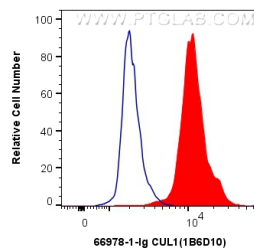
Various lysates were subjected to SDS PAGE followed by western blot with 66978-1-Ig (CUL1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66978-1-Ig (CUL1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using CUL1 antibody (66978-1-Ig, Clone: 1B6D10) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1X10⁶ HEK-293 cells were intracellularly stained with 0.4 ug Anti-Human CUL1 (66978-1-Ig, Clone:1B6D10) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2b Isotype Control (66360-3-Ig, Clone: K11B8C4B5) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).