

**AP51139PU-N****Polyclonal Antibody to Cullin 1 (C-term) - Aff - Purified****Alternate names:**

CUL-1, CUL1, Cullin-1

**Quantity:**

0.4 ml

**Concentration:**

lot specific

**Background:**

Core component of multiple cullin-RING-based SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription. In the SCF complex, serves as a rigid scaffold that organizes the SKP1-F-box protein and RBX1 subunits. May contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme. The E3 ubiquitin-protein ligase activity of the complex is dependent on the neddylation of the cullin subunit and is inhibited by the association of the deneddylated cullin subunit with TIP120A/CAND1. The functional specificity of the SCF complex depends on the F-box protein as substrate recognition component. SCF(BTRC) and SCF(FBXW11) direct ubiquitination of CTNNB1 and participate in Wnt signaling. SCF(FBXW11) directs ubiquitination of phosphorylated NFKBIA. SCF(BTRC) directs ubiquitination of NFKBIB, NFKBIE, ATF4, SMAD3, SMAD4, CDC25A, FBXO5 and probably NFKB2. SCF(SKP2) directs ubiquitination of phosphorylated CDKN1B/p27kip and is involved in regulation of G1/S transition. SCF(SKP2) directs ubiquitination of ORC1L, CDT1, RBL2, ELF4, CDKN1A, RAG2, FOXO1A, and probably MYC and TAL1. SCF(FBXW7) directs ubiquitination of cyclin E, NOTCH1 released notch intracellular domain (NICD), and probably PSEN1. SCF(FBXW2) directs ubiquitination of GCM1. SCF(FBXO32) directs ubiquitination of MYOD1. SCF(FBXO7) directs ubiquitination of BIRC2 and DLGAP5. SCF(FBXO33) directs ubiquitination of YBX1. SCF(FBXO11) does not seem to direct ubiquitination of TP53. SCF(BTRC) mediates the ubiquitination of NFKBIA at 'Lys-21' and 'Lys-22'; the degradation frees the associated NFKB1-RELA dimer to translocate into the nucleus and to activate transcription. SCF(Cyclin F) directs ubiquitination of CP110 (By similarity).

**Uniprot ID:**[Q13616](#)**NCBI:**[NP\\_003583](#)**GeneID:**[8454](#)**Host / Isotype:**

Rabbit / Ig

**Immunogen:**

KLH conjugated synthetic peptide between 679-708 amino acids from the C-terminal region of human CUL1

**Format:****State:** Liquid purified Ig fraction**Purification:** Affinity chromatography on Protein A**Buffer System:** PBS**Preservatives:** 0.09% (W/V) sodium azide**Applications:****ELISA:** 1/1000.**Western Blot:** 1/100 - 1/500.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Molecular Weight:** 89679 Da

**Specificity:** This antibody reacts to CUL1.

**Species Reactivity:** **Tested:** Human.

**Storage:** Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:**

1. Gao, D., et al. Mol. Cell 39(5):797-808(2010)
2. Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010)
3. Kleiger, G., et al. Cell 139(5):957-968(2009)
4. Cunningham, J.M., et al. Br. J. Cancer 101(8):1461-1468(2009)
5. Korzeniewski, N., et al. Cancer Res. 69(16):6668-6675(2009)

**Pictures:** CUL1 Antibody (C-term) (Cat. #AP51139PU-N) western blot analysis in HeLa cell line lysates (35µg/lane). This demonstrates the CUL1 antibody detected the CUL1 protein (arrow).

