Product datasheet for TA327291S

Cullin 1 (CUL1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	WB 1:500 - 1:2000;IF 1:10 - 1:100
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human CUL1
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	90 kDa
Gene Name:	cullin 1
Database Link:	NP_003583
	Entrez Gene 26965 Mouse Entrez Gene 362356 Rat Entrez Gene 8454 Human
	Q13616

Background:

Ubiquitin can be covalently linked to many cellular proteins by the ubiquitination process, which targets proteins for degradation by the 26S proteasome. Three components are involved in the target protein-ubiquitin conjugation process. Ubiquitin is first activated by forming a thiolester complex with the activation component E1; the activated ubiquitin is subsequently transferred to the ubiquitin-carrier protein E2, then from E2 to ubiquitin ligase E3 for final delivery to the epsilon-NH2 of the target protein lysine residue. Combinatorial interactions of different E2 and E3 proteins result in substrate specificity. Recent data suggest that activated E2 associates transiently with E3, and that the dissociation is a critical step for ubiqitination. Cullin homolog 1 (CUL1), the mammalian homolog of Cdc53 from yeast, is a molecular scaffold of the SCF (Skp1/CUL1/F-box) E3 ubiquitin ligase protein complex. Thus, CUL1 and its family members function in ubiquitin dependent proteolysis. In particular, CUL1 has been shown to mediate ubiquitin dependent degradation of p21 Waf1/Cip1, cyclin D and IkappaB-alpha.
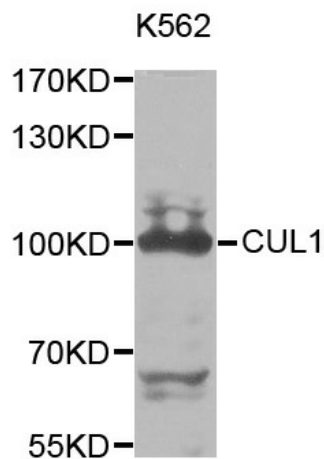
Synonyms: MGC149834; MGC149835

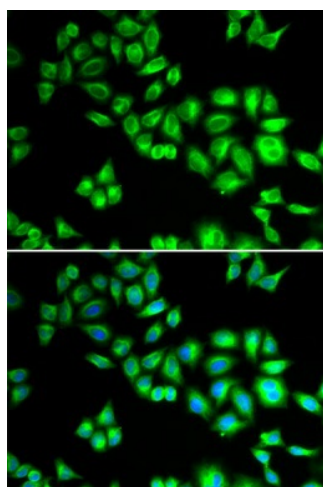**Protein Families:**   Druggable Genome

Protein Pathways: Cell cycle, Oocyte meiosis, TGF-beta signaling pathway, Ubiquitin mediated proteolysis, Wnt signaling pathway

Product images:

Western blot analysis of extracts of K562 cell line, using CUL1 antibody.

Immunofluorescence analysis of HeLa cell using CUL1 antibody. Blue: DAPI for nuclear staining.