

CUL1 Antibody

Catalog No: #32618

Package Size: #32618-1 50ul #32618-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

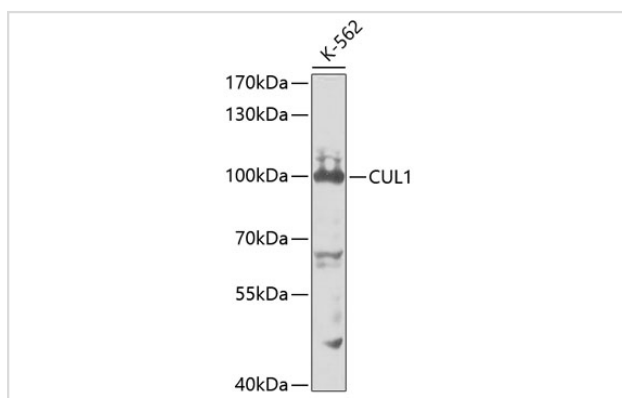
Description

Product Name	CUL1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total CUL1 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human CUL1.
Target Name	CUL1
Other Names	MGC149834; MGC149835;
Accession No.	Swiss-Prot:Q13616NCBI Gene ID:8454
Uniprot	Q13616
GeneID	8454;
SDS-PAGE MW	90KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

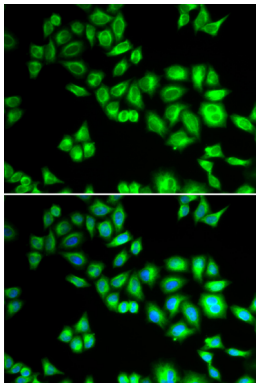
Application Details

WB □ 1:500 - 1:2000IF □ 1:10 - 1:100

Images



Western blot analysis of extracts of K-562 cells, using CUL1 at 1:1000 dilution.



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

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 (1-3). Combinatorial interactions of different E2 and E3 proteins result in substrate specificity (4). Recent data suggest that activated E2 associates transiently with E3, and that the dissociation is a critical step for ubiquitination (5). 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 (6). In particular, CUL1 has been shown to mediate ubiquitin dependent degradation of p21 Waf1/Cip1, cyclin D and IκappaB-alpha (7,8).

Note: This product is for in vitro research use only