

# CUL-2 (H-300): sc-10781

## BACKGROUND

Cullin proteins comprise a distinct family of mediators that participate in the selective targeting of proteins for ubiquitin (Ub)-mediated proteolysis. CUL-1, which is the mammalian homolog of yeast Cdc53, is an integral component of the E3 ubiquitin ligase complex designated SCF. The SCF (Skp1/CUL-1/F-box protein complex) consists of Skp1 associating with both CUL-1 and an F-box protein, such as Skp2, which determines the substrate specificity of the complex. CUL-1-mediated ubiquitination results in the degradation of cell cycle proteins cyclin D, p21 and cyclin E. Another cullin, CUL-3, facilitates the degradation of cyclin E independent of SCF activity, while CUL-2 associates with the tumor suppressing protein VHL and elongin B to form VBC complexes, which structurally resemble the SCF ligase. Proteolysis also occurs by way of CUL-4 associating with Nedd-8, a ubiquitin-like protein, where it too functions as an active component of a multifunctional E3 complex. CUL-5, also designated vasopressin-activated, calcium-mobilizing protein (VACM-1), is also included in the cullin family as it shares substantial sequence homology with CUL-1.

## CHROMOSOMAL LOCATION

Genetic locus: CUL2 (human) mapping to 10p11.21; Cul2 (mouse) mapping to 18 A1.

## SOURCE

CUL-2 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of CUL-2 (cullin-2) of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

CUL-2 (H-300) is recommended for detection of CUL-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CUL-2 (H-300) is also recommended for detection of CUL-2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CUL-2 siRNA (h): sc-35128, CUL-2 siRNA (m): sc-35129, CUL-2 shRNA Plasmid (h): sc-35128-SH, CUL-2 shRNA Plasmid (m): sc-35129-SH, CUL-2 shRNA (h) Lentiviral Particles: sc-35128-V and CUL-2 shRNA (m) Lentiviral Particles: sc-35129-V.

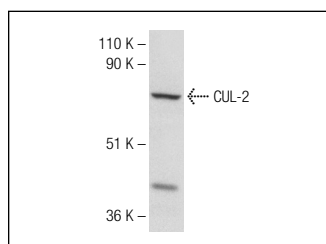
Molecular Weight of CUL-2: 70-80 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or K-562 whole cell lysate: sc-2203.

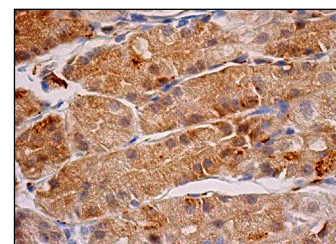
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



CUL-2 (H-300): sc-10781. Western blot analysis of CUL-2 expression in K-562 whole cell lysate.



CUL-2 (H-300): sc-10781. Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing cytoplasmic and nuclear staining of glandular cells.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Satisfaction  
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Try **CUL-2 (C-4): sc-166506**, our highly recommended monoclonal alternative to CUL-2 (H-300).