

CUL1 RABBIT PAB

Cat.#: S214973

Product Name: Anti-CUL1 Rabbit Polyclonal Antibody

Synonyms:

UNIPROT ID: Q13616 (Gene Accession - NP_003583)

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 exchange of the substrate recognition component is mediated by 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 ORC1, 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 MYO1. SCF(FBXO7) directs ubiquitination of BIRC2 and DLGAP5. SCF(FBXO33) directs ubiquitination of YBX1. SCF(FBXO1) directs ubiquitination of BCL6 and DTL but 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(CCNF) directs ubiquitination of CCPI10. SCF(FBXL3) and SCF(FBXL21) direct ubiquitination of CRY1 and CRY2. SCF(FBXO9) direct ubiquitination of TTI1 and TELO2. SCF(FBXO10) directs ubiquitination of BCL2.

Immunogen: Synthetic peptide of human CUL1

Applications: ELISA, IHC

Recommended Dilutions: IHC: 25-100; ELISA: 2000-5000

Host Species: Rabbit

Clonality: Rabbit Polyclonal

Isotype: Immunogen-specific rabbit IgG

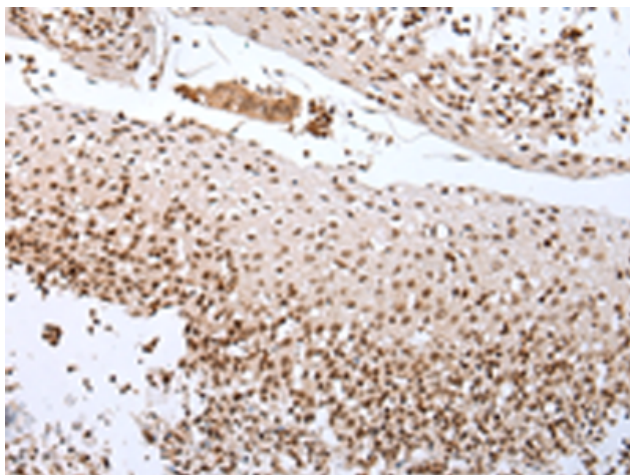
Purification: Antigen affinity purification

Species Reactivity: Human, Mouse

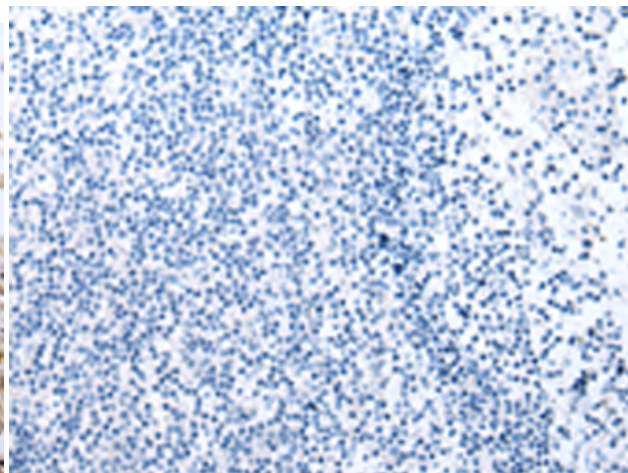
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

Research Areas: Cancer, Cell Biology

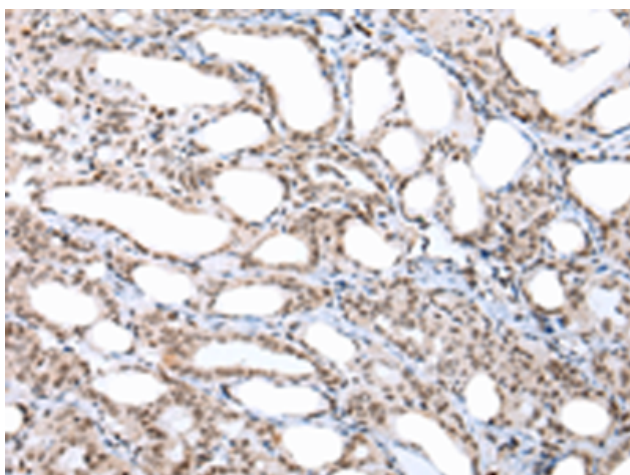
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



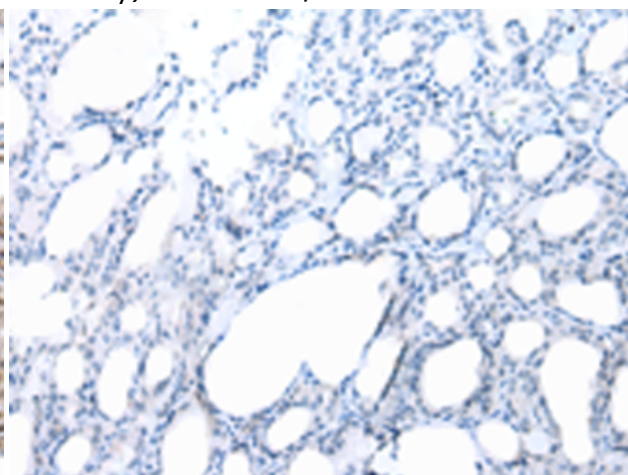
Immunohistochemistry analysis of paraffin embedded Human tonsil tissue using 214973(CUL1 Antibody) at a dilution of 1/20(Nucleus).



In comparison with the IHC on the left, the same paraffin-embedded Human tonsil tissue is first treated with the synthetic peptide and then with 214973(Anti-CUL1 Antibody) at dilution 1/20.



The image on the left is immunohistochemistry of paraffin-embedded Human thyroid cancer tissue using 214973(Anti-CUL1 Antibody) at a dilution of 1/20.



In comparison with the IHC on the left, the same paraffin-embedded Human thyroid cancer tissue is first treated with synthetic peptide and then with D162699(Anti-CUL1 Antibody) at dilution 1/20.