

CUL5 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP7577c**Specification**

CUL5 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q93034](#)**CUL5 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 8065**Other Names**

Cullin-5, CUL-5, Vasopressin-activated calcium-mobilizing receptor 1, VACM-1, CUL5, VACM1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7577c](/products/AP7577c) was selected from the Center region of human CUL5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CUL5 Antibody (Center) Blocking Peptide - Protein Information**Name** CUL5 {ECO:0000303|PubMed:10230407, ECO:0000312|HGNC:HGNC:2556}**Function**

Core component of multiple SCF-like ECS (Elongin-Cullin 2/5- SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed: [11384984](http://www.uniprot.org/citations/11384984), PubMed: [15601820](http://www.uniprot.org/citations/15601820)). As a scaffold protein may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme (PubMed: [11384984](http://www.uniprot.org/citations/11384984), PubMed: [15601820](http://www.uniprot.org/citations/15601820)). The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition component (PubMed: [11384984](http://www.uniprot.org/citations/11384984), PubMed: [15601820](http://www.uniprot.org/citations/15601820)). ECS(SOCS1) seems to direct ubiquitination of JAK2 (PubMed: [11384984](http://www.uniprot.org/citations/11384984), PubMed: [15601820](http://www.uniprot.org/citations/15601820)).

[11384984](http://www.uniprot.org/citations/11384984)). ECS(KLHDC1) complex is part of the DesCEND (destruction via C-end degrons) pathway and mediates ubiquitination and degradation of truncated SELENOS selenoprotein produced by failed UGA/Sec decoding, which ends with a glycine (PubMed: [32200094](http://www.uniprot.org/citations/32200094)). As part of a multisubunit complex composed of elongin BC complex (ELOB and ELOC), elongin A/ELOA, RBX1 and CUL5; polyubiquitinates monoubiquitinated POLR2A (PubMed: [19920177](http://www.uniprot.org/citations/19920177)). May form a cell surface vasopressin receptor (PubMed: [9037604](http://www.uniprot.org/citations/9037604)).

Cellular Location

Nucleus. Note=Localizes to sites of DNA damage in a UBAP2 and UBAP2L-dependent manner.

CUL5 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

CUL5 Antibody (Center) Blocking Peptide - Images

CUL5 Antibody (Center) Blocking Peptide - Background

CUL5 is a core component of multiple SCF-like ECS (Elongin-Cullin 2/5-SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination and subsequent proteasomal degradation of target proteins. As a scaffold protein may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme. The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition component. ECS(SOCS1) seems to direct ubiquitination of JAK2. It seems to be involved proteasomal degradation of p53/TP53 stimulated by adenovirus E1B-55 kDa protein and may form a cell surface vasopressin receptor.

CUL5 Antibody (Center) Blocking Peptide - References

Kamura T., Burian D., Yan Q.J. Biol. Chem. 276:29748-29753(2001)Mehle A., Goncalves J., Santa-Marta M. Genes Dev. 18:2861-2866(2004)Kamura T., Maenaka K., Kotoshiba S. Genes Dev. 18:3055-3065(2004)