10320 Camino Santa Fe, Suite G
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CRBN / Cereblon Antibody (C-Terminus)

Rabbit Polyclonal Antibody
Catalog # ALS16420

Specification

CRBN / Cereblon Antibody (C-Terminus) - Product Information

Application	**IHC, IF**
Primary Accession	Q96SW2
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**51kDa KDa**

CRBN / Cereblon Antibody (C-Terminus) - Additional Information

Gene ID 51185

Other Names
Protein cereblon, CRBN

Target/Specificity
CRBN antibody is human, mouse and rat reactive. At least two isoforms of CRBN are known to exist; this antibody will detect both isoforms.

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
CRBN / Cereblon Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

CRBN / Cereblon Antibody (C-Terminus) - Protein Information

Name CRBN

Function
Substrate recognition component of a DCX (DDB1-CUL4-X-box) E3 protein ligase complex that mediates the ubiquitination and subsequent proteasomal degradation of target proteins, such as MEIS2 or ILF2 (PubMed:33009960). Normal degradation of key regulatory proteins is required for normal limb outgrowth and expression of the fibroblast growth factor FGF8 (PubMed:20223979, PubMed:24328678, PubMed:25043012, PubMed:25108355). Maintains presynaptic glutamate release and consequently cognitive functions, such as memory and learning, by negatively regulating large-conductance calcium-activated potassium (BK) channels in excitatory neurons (PubMed:<a href="http://www.uniprot.org/citations/18414909"

target="_blank">18414909, PubMed:29530986). Likely to function by regulating the assembly and neuronal surface expression of BK channels via its interaction with KCNT1 (PubMed:18414909). May also be involved in regulating anxiety-like behaviors via a BK channel-independent mechanism (By similarity). Plays a negative role in TLR4 signaling by interacting with TRAF6 and ECSIT, leading to inhibition of ECSIT ubiquitination, an important step of the signaling (PubMed:31620128).

Cellular Location
Cytoplasm. Nucleus. Membrane; Peripheral membrane protein

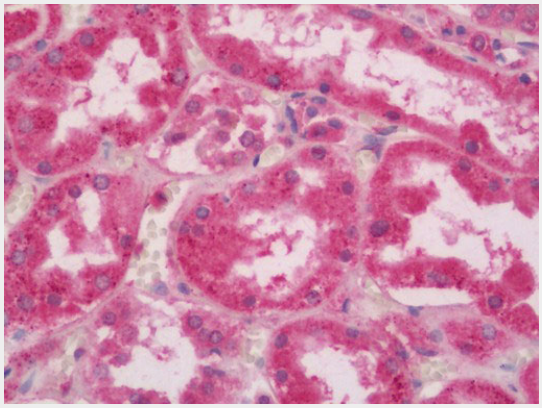
Tissue Location
Widely expressed. Highly expressed in brain.

CRBN / Cereblon Antibody (C-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CRBN / Cereblon Antibody (C-Terminus) - Images



Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)

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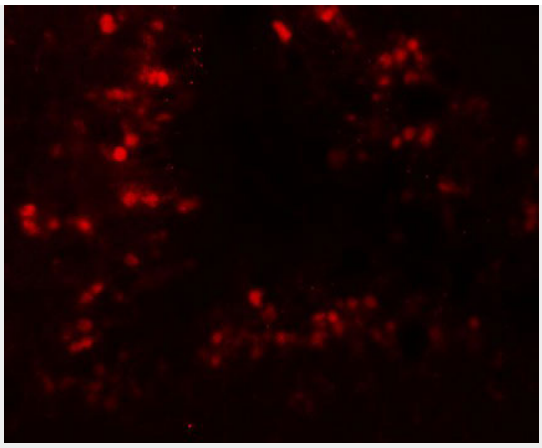

Immunofluorescence of CRBN in rat testis tissue with CRBN antibody at 20 ug/mL.

CRBN / Cereblon Antibody (C-Terminus) - Background

Substrate recognition component of a DCX (DDB1-CUL4-X- box) E3 protein ligase complex that mediates the ubiquitination and subsequent proteasomal degradation of target proteins, such as MEIS2. Normal degradation of key regulatory proteins is required for normal limb outgrowth and expression of the fibroblast growth factor FGF8. May play a role in memory and learning by regulating the assembly and neuronal surface expression of large-conductance calcium-activated potassium channels in brain regions involved in memory and learning via its interaction with KCNT1. Binding of pomalidomide and other thalidomide-related drugs changes the substrate specificity of the human protein, leading to decreased degradation of MEIS2 and other target proteins and increased degradation of MYC, IRF4, IKZF1 and IKZF3.

CRBN / Cereblon Antibody (C-Terminus) - References

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Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).
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Higgins J.J.,et al.Neurology 63:1927-1931(2004).