

Anti-CRBN Antibody [PSH0-70]

HA721458



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 51 kDa
Clone number:	PSH0-70

Description: Cereblon is a protein that in humans is encoded by the CRBN gene. The gene that encodes the cereblon protein is found on the human chromosome 3, on the short arm at position p26.3 from base pair 3,190,676 to base pair 3,221,394. CRBN orthologs are highly conserved from plants to humans. Cereblon forms an E3 ubiquitin ligase complex with damaged DNA binding protein 1 (DDB1), Cullin-4A (CUL4A), and regulator of cullins 1 (ROC1). This complex ubiquitinates a number of other proteins. Through a mechanism which has not been completely elucidated, this ubiquitination results in reduced levels of fibroblast growth factor 8 (FGF8) and fibroblast growth factor 10 (FGF10). FGF8 in turn regulates a number of developmental processes, such as limb and auditory vesicle formation. The net result is that this ubiquitin ligase complex is important for limb outgrowth in embryos. In the absence of cereblon, DDB1 forms a complex with DDB2 that functions as a DNA damage-binding protein. Furthermore, cereblon and DDB2 bind to DDB1 in a competitive manner.

Immunogen: Recombinant protein within human CRBN aa 1-442 / 442.

Positive control: HEK-293 cell lysate, A375 cell lysate, A549 cell lysate, HeLa cell lysate, SH-SY5Y cell lysate, NIH/3T3 cell lysate, mouse brain tissue lysate, rat testis tissue lysate, human testis tissue, mouse testis tissue, rat testis tissue.

Subcellular location: Cytoplasm, Nucleus, Membrane.

Database links: SwissProt: Q96SW2 Human | Q8C7D2 Mouse | Q56AP7 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:200

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

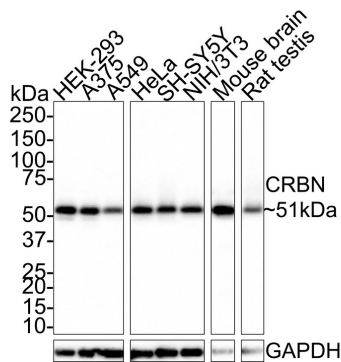
Technical:0086-571-89986345

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Images

Fig1: Western blot analysis of CRBN on different lysates with Rabbit anti-CRBN antibody (HA721458) at 1/1,000 dilution.



Lane 1: HEK-293 cell lysate
 Lane 2: A375 cell lysate
 Lane 3: A549 cell lysate
 Lane 4: HeLa cell lysate
 Lane 5: SH-SY5Y cell lysate
 Lane 6: NIH/3T3 cell lysate
 Lane 7: Mouse brain tissue lysate
 Lane 8: Rat testis tissue lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 51 kDa
 Observed band size: 51 kDa

Exposure time: 40 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (HA721458) at 1/1,000 dilution was used in 5% NFDN/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

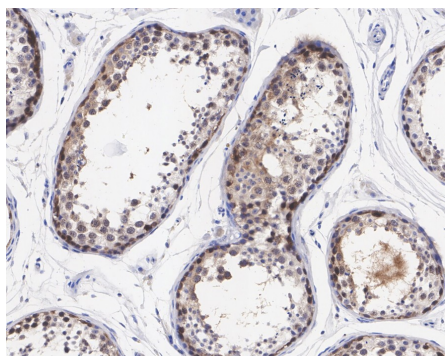


Fig2: Immunohistochemical analysis of paraffin-embedded human testis tissue with Rabbit anti-CRBN antibody (HA721458) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721458) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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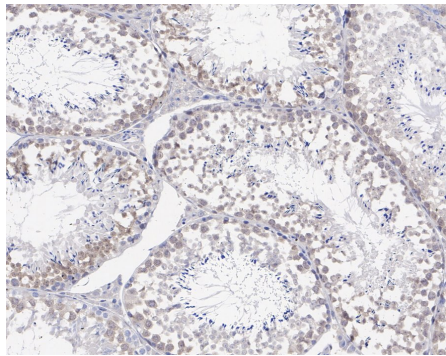


Fig3: Immunohistochemical analysis of paraffin-embedded mouse testis tissue with Rabbit anti-CRBN antibody (HA721458) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721458) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

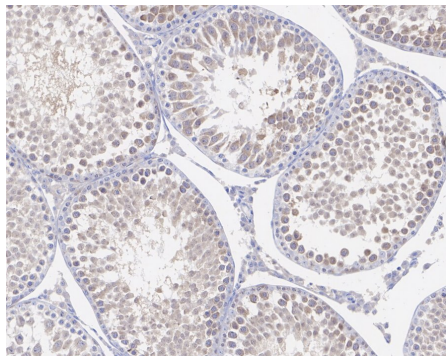


Fig4: Immunohistochemical analysis of paraffin-embedded rat testis tissue with Rabbit anti-CRBN antibody (HA721458) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721458) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Fig5: Western blot analysis of CRBN on different lysates with Rabbit anti-CRBN antibody (HA721458) at 1/1,000 dilution.

Lane 1: HeLa-si NT cell lysate

Lane 2: HeLa-si CRBN cell lysate

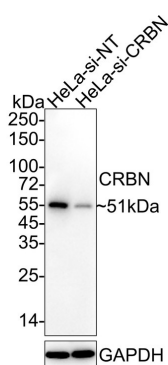
Lysates/proteins at 10 µg/Lane.

Predicted band size: 51 kDa

Observed band size: 51 kDa

Exposure time: 2 minutes;

4-20% SDS-PAGE gel.



Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (HA721458) at 1/1,000 dilution was used in 5% NFDN/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Wang C et al. Developments of CRBN-based PROTACs as potential therapeutic agents. *Eur J Med Chem.* 2021 Dec
2. Yamamoto J et al. Discovery of CRBN as a target of thalidomide: a breakthrough for progress in the development of protein degraders. *Chem Soc Rev.* 2022 Aug

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