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# Rabbit Anti-CRBN antibody

SL25408R

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|---|---|
| **Product Name** | CRBN |
| **Chinese Name** | cereblon 蛋白抗体 |
| **Alias** | Cereblon; DKFZp781K0715; MGC27358; MRT2A; OTTHUMP00000209555; piL; Protein cereblon; Protein x 0001; 2610203G15Rik; 2900045O07Rik; AF229032; AW108261; CRBN_HUMAN. |
| **Research Area** | Cell biology Neurobiology Cell Surface Molecule |
| **Immunogen Species** | Rabbit |
| **Clonality** | Polyclonal |
| **React Species** | Human(predicted:Mouse,Rat,Chicken,Pig,Cow,Rabbit,Sheep) |
| **Applications** | WB=1:500-2000<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Theoretical molecular weight** | 51kDa |
| **Cellular localization** | The nucleus cytoplasmic The cell membrane |
| **Form** | Liquid |
| **Concentration** | 1mg/ml |
| **immunogen** | KLH conjugated synthetic peptide derived from human CRBN |
| **Lsotype** | IgG |
| **Purification** | affinity purified by Protein A |
| **Buffer Solution** | 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. |
| **Storage** | Shipped at 4℃. Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. |
| **Attention** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **PubMed** | PubMed |
| **Product Detail** | CRBN is a 442 amino acid protein which is highly concentrated in human brain tissue. CRBN functions are thought to be related to |

energy metabolism, learning and memory. Localized to the cytoplasm, CRBN acts as a protease in mitochondria and is thought to regulate the assembly of KCNT1, as well as the surface expression of KCNT1 in brain regions known to affect memory and learning, such as the hippocampus. The gene encoding CRBN belongs to a family of ATP-dependent lon proteases that play a role in membrane trafficking and proteolysis. Defects in the CRBN gene are associated with mild mental retardation.

**Function:**
Protein cereblon modulates cell surface expression of KCNT1 and may be involved in memory and learning. It is highly expressed in brain and defects in CRBN are the cause of non syndromic mental retardation autosomal recessive type 2A (MRT2A) [MIM:607417]. Although it contains a Lon domain also found in proteases of the peptidase S16 family, it does not contain the ATP binding and catalytic domains, suggesting that it has no protease activity.

**Subunit:**
Interacts with KCNT1 (By similarity). Component of a DCX (DDB1-CUL4-X-box) protein ligase complex, at least composed of CRBN, CUL4A, DDB1 and RBX1.

**Subcellular Location:**
Cytoplasm. Nucleus. Membrane; Peripheral membrane protein

**Tissue Specificity:**
Widely expressed. Highly expressed in brain.

**Post-translational modifications:**
Ubiquitinated, ubiquitination is mediated by its own DCX protein ligase complex.

**DISEASE:**
Defects in CRBN are the cause of mental retardation autosomal recessive type 2A (MRT2A) [MIM:607417]. MRT2A patients display mild mental retardation with a standard IQ ranged from 50 to 70. IQ scores are lower in males than females. Developmental milestones are mildly delayed. There are no dysmorphic or autistic features. Non-syndromic mental retardation patients do not manifest other clinical signs.

**Similarity:**
Belongs to the CRBN family.

**SWISS:**

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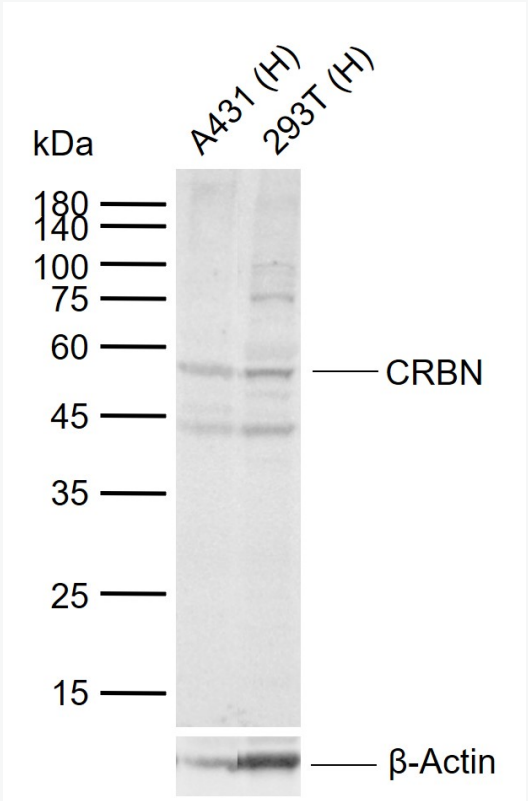
Q96SW2

**Gene ID:**
51185

**Product Picture**




Sample:

Lane 1: Human A431 cell lysates

Lane 2: Human 293T cell lysates

Primary: Anti-CRBN (SL25408R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 51 kDa

Observed band size: 55 kDa