SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-CRBN antibody

SL11716R

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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Zebrafish,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	51kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CRBN:210-288/442
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
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.
Contains 1 Lon domain.

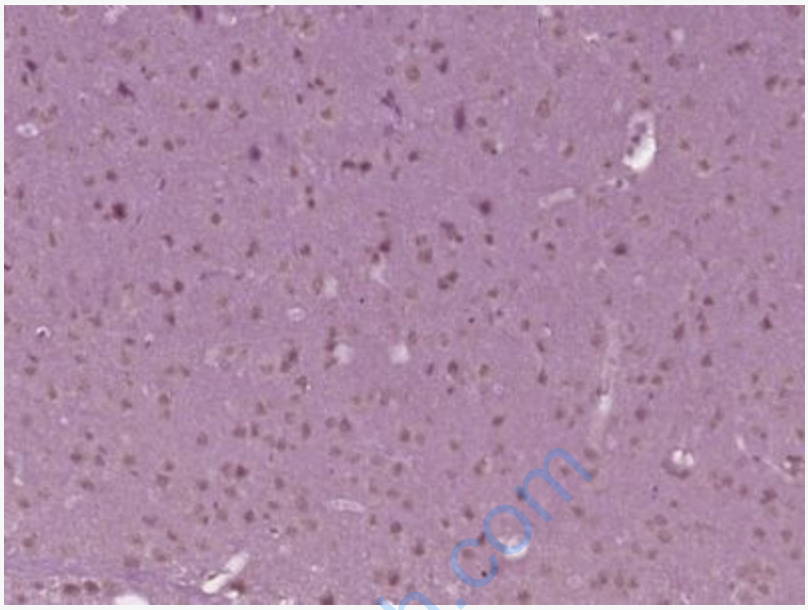
SWISS:
Q96SW2

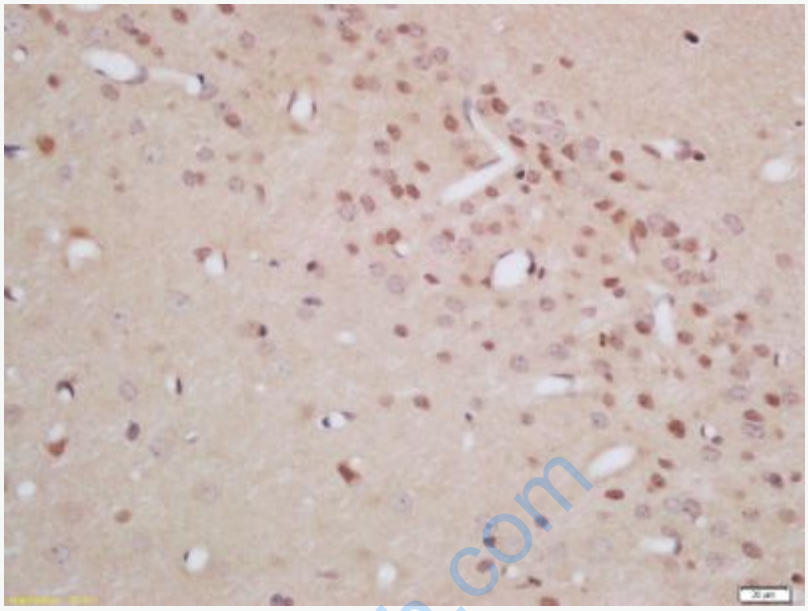
Gene ID:
51185

Database links:

Entrez Gene: 51185Human

	Entrez Gene: 58799Mouse Entrez Gene: 297498Rat Entrez Gene: 445491Zebrafish GenBank: NM_016302.2Human Omim: 607417Human SwissProt: Q96SW2Human SwissProt: Q8C7D2Mouse SwissProt: Q56AP7Rat SwissProt: Q68EH9Zebrafish Unigene: 18925Human Unigene: 290085Mouse Unigene: 195259Rat Unigene: 84847Zebrafish **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

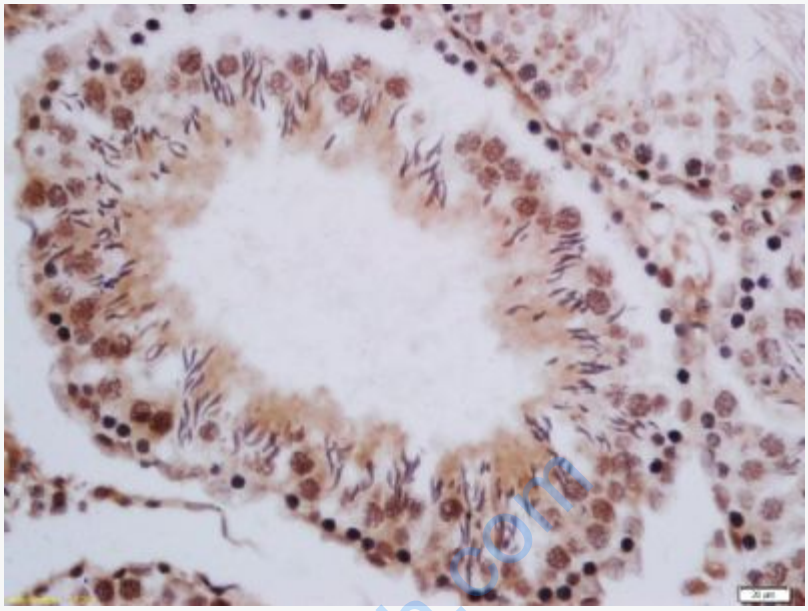
Picture:	 Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CRBN) Polyclonal Antibody, Unconjugated (SL11716R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-CRBN Polyclonal Antibody, Unconjugated(SL11716R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat testis tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-CRBN Polyclonal Antibody, Unconjugated(SL11716R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining