

# Rabbit Anti-COMMD10 antibody

# SL8181R

Product Name:	COMMD10
Chinese Name:	铜代谢结构域蛋白10抗体
Alias:	COMM domain containing 10; COMMD 10; FLJ11285; HGNC:30201; HSPC305; PTD002.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	21kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human COMMD10:91-190/190
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 PubMed
Product Detail:	COMMD or COMM is a new family of proteins with homology to MURR1, a multifunctional protein that inhibits NFkB. These proteins form multimeric complexes and were identified in a biochemical screen for MURR1-associated factors. The family is defined by the presence of a conserved and unique motif termed the COMM (copper metabolism gene MURR1) domain, which functions as an interface for protein-protein
	interactions. The proteins designated as COMMD or COMM domain containing 1-10

are extensively conserved in multicellular eukaryotic organisms and define a novel family of structural and functional homologs of MURR1. The prototype of this family, MURR1/COMMD1, suppresses NFkB not by affecting nuclear translocation or binding of NF-kappaB to cognate motifs; rather, it functions in the nucleus by affecting the association of NF-kappaB with chromatin.

#### **Function:**

Promotes ubiquitination of NF-kappa-B subunit RELA and its subsequent proteasomal degradation. Down-regulates NF-kappa-B activity. Down-regulates SOD1 activity by interfering with its homodimerization. Plays a role in copper ion homeostasis. Can bind one copper ion per monomer. May function to facilitate biliary copper excretion within hepatocytes.

#### **Subunit:**

Monomer and homodimer. Interacts (via COMM domain) with COMMD2, COMMD3, COMMD4, COMMD5, COMMD6, COMMD7, COMMD8 and COMMD10 (via COMM domain). Identified in a complex with an E3 ubiquitin ligase complex composed of TCEB1/elongin C, CUL2, SOCS1 and RBX1. Interacts directly with SOCS1 and CUL2. Interacts directly the N-terminal region of ATP7B. Interacts with CCS, CDKN2A, RELA and NFKBIB. Identified in a complex with NF-kappa-B. Interacts with CLU.

#### **Subcellular Location:**

Nucleus. Cytoplasm. Note=Shuttles between nucleus and cytosol. Detected in perinuclear foci that may be aggresomes containing misfolded, ubiquitinated proteins.

#### Tissue Specificity:

Ubiquitous. Highest expression in the liver, with lower expression in brain, lung, placenta, pancreas, small intestine, heart, skeletal muscle, kidney and placenta.

#### Post-translational modifications:

Ubiquitinated; undergoes both 'Lys-63'- and 'Lys-48'-linked polyubiquitination. Ubiquitinated by XIAP, leading to its proteasomal degradation.

#### Similarity:

Contains 1 COMM domain.

#### **SWISS:**

Q9Y6G5

#### Gene ID:

51397

#### Database links:

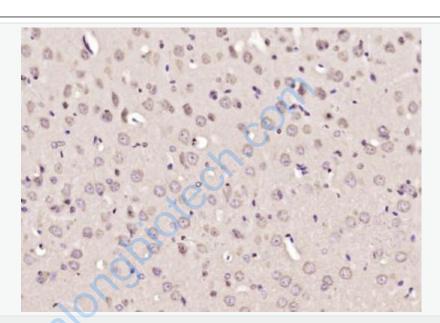
Entrez Gene: 51397Human

SwissProt: Q9Y6G5Human

Unigene: 483136Human

## 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 (COMMD10) Polyclonal Antibody, Unconjugated (SL8181R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.