



Rabbit Anti-CASC3 antibody

SL4097R

Product Name:	CASC3
Chinese Name:	Tumour易感候选基因3抗体
Alias:	Barentsz protein; Btz; Cancer susceptibility candidate gene 3 protein; Metastatic lymph node protein 51; MLN 51 protein; MLN51; Protein barentsz; Protein CASC3; Protein MLN 51; MLN51; CASC3 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,Horse,
Applications:	WB=1:500-2000ELISA=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:	76kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CASC3/MLN51:501-600/703
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:	The multiprotein exon junction complex (EJC) is deposited on mRNAs upstream of exon-exon junctions as a consequence of pre-mRNA splicing. In mammalian cells, this complex serves as a key modulator of spliced mRNA metabolism. MLN51 is a nucleocytoplasmic shuttling protein that is overexpressed in breast cancer. The function of MLN51 in mammals remains elusive. Its fly homolog, named barentsz, as well as the

proteins mago nashi and tsunagi have been shown to be required for proper oskar mRNA localization to the posterior pole of the oocyte. Magoh and Y14, the human homologs of mago nashi and tsunagi, are core components of the exon junction complex (EJC). The EJC is assembled on spliced mRNAs and plays important roles in post-splicing events including mRNA export, nonsense-mediated mRNA decay, and translation. Human MLN51 is an RNA-binding protein present in ribonucleo-protein complexes.

Function:

Component of a splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junction on mRNAs. The EJC is a dynamic structure consisting of a few core proteins and several more peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. Core components of the EJC, that remains bound to spliced mRNAs throughout all stages of mRNA metabolism, functions to mark the position of the exon-exon junction in the mature mRNA and thereby influences downstream processes of gene expression including mRNA splicing, nuclear mRNA export, subcellular mRNA localization, translation efficiency and nonsense-mediated mRNA decay (NMD). Stimulates the ATPase and RNA-helicase activities of EIF4A3. Plays a role in the stress response by participating in cytoplasmic stress granules assembly and by favoring cell recovery following stress. Component of the dendritic ribonucleoprotein particles (RNPs) in hippocampal neurons (By similarity). May play a role in mRNA transport (By similarity). Binds spliced mRNA in sequence-independent manner, 20-24 nucleotides upstream of mRNA exon-exon junctions. Binds poly(G) and poly(U) RNA homopolymer.

Subunit:

Forms homooligomers. Interacts with STAU in an RNA-dependent manner. Part of the EJC core complex that contains CASC3, EIF4A3, MAGOH and RBM8A. Found in a mRNA splicing-dependent exon junction complex (EJC), at least composed of ACIN1, CASC3, EIF4A3, MAGOH, PNN, RBM8A, RNPS1, SAP18 and ALYREF/THOC4. Interacts with EIF4A3, MAGOH, NXF1 and RBM8A.

Subcellular Location:

Widely expressed. Overexpressed in breast cancers and metastasis, as well as in gastric cancers.

Tissue Specificity:

Cytoplasm, perinuclear region. Nucleus. Nucleus speckle.

Post-translational modifications:

ADP-ribosylated by tankyrase TNKS and TNKS2. Poly-ADP-ribosylated protein is recognized by RNF146, followed by ubiquitination.

Ubiquitinated by RNF146 when poly-ADP-ribosylated, leading to its degradation.

Similarity:

Belongs to the CASC3 family.

SWISS:
O15234

Gene ID:
22794

Database links:

[Entrez Gene: 531673](#)Cow

[Entrez Gene: 22794](#)Human

[Entrez Gene: 192160](#)Mouse

[Entrez Gene: 259170](#)Rat

[Omim: 606504](#)Human

[SwissProt: A5D7H5](#)Cow

[SwissProt: O15234](#)Human

[SwissProt: Q8K3W3](#)Mouse

[SwissProt: Q8K3X0](#)Rat

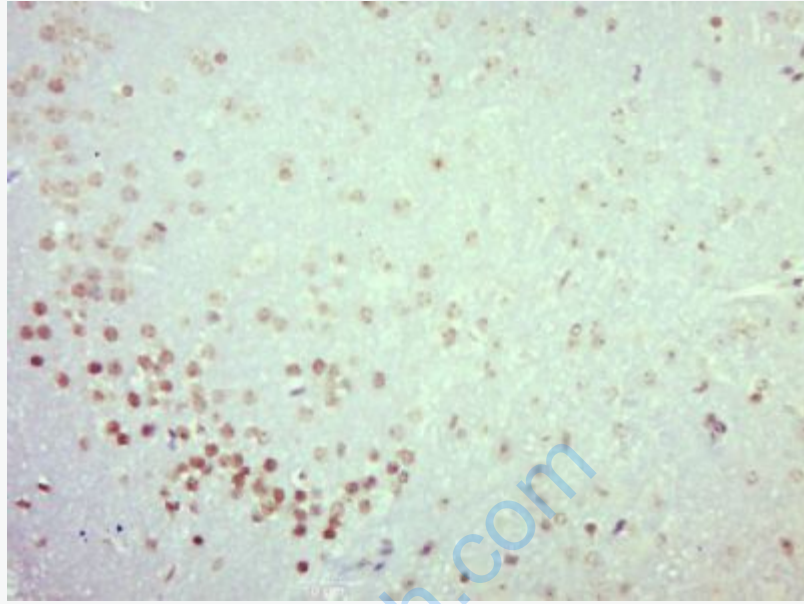
[Unigene: 592129](#)Human

[Unigene: 40120](#)Mouse

[Unigene: 162194](#)Rat

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 (CASC3) Polyclonal Antibody, Unconjugated (SL4097R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.