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CASC3 Antibody (Y181)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7264d

Product Information

Application	IHC-P, WB, E
Primary Accession	O15234
Other Accession	A0JMU8, Q8K3X0, Q8K3W3, Q1ECZ4, A5D7H5, NP_619601
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Zebrafish, Mouse, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15327
Calculated MW	76278
Antigen Region	159-188

Additional Information

Gene ID	22794
Other Names	Protein CASC3, Cancer susceptibility candidate gene 3 protein, Metastatic lymph node gene 51 protein, MLN 51, Protein barentsz, Btz, CASC3, MLN51
Target/Specificity	This CASC3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 159-188 amino acids from human CASC3.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CASC3 Antibody (Y181) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CASC3
Synonyms	MLN51 {ECO:0000303|PubMed:12080473}

Function	Required for pre-mRNA splicing as component of the spliceosome (PubMed:28502770, PubMed:29301961). Core component of the splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junctions on mRNAs. The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. The EJC marks the position of the exon-exon junction in the mature mRNA for the gene expression machinery and the core components remain bound to spliced mRNAs throughout all stages of mRNA metabolism thereby influencing downstream processes including 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. May play a role in mRNA transport. Binds spliced mRNA in sequence-independent manner, 20-24 nucleotides upstream of mRNA exon-exon junctions. Binds poly(G) and poly(U) RNA homomer.
Cellular Location	Cytoplasm. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q8K3W3}. Nucleus. Nucleus speckle. Cytoplasm, Stress granule. Cytoplasm, Cytoplasmic ribonucleoprotein granule {ECO:0000250|UniProtKB:Q8K3X0}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q8K3X0}. Note=Shuttles between the nucleus and the cytoplasm in a XPO1/CRM1-dependent manner. Transported to the cytoplasm as part of the exon junction complex (EJC) bound to mRNA (PubMed:15166247). In nuclear speckles, colocalizes with MAGOH. Under stress conditions, colocalizes with FMR1 and TIA1, but not MAGOH and RBM8A EJC core factors, in cytoplasmic stress granules (PubMed:17652158). In the dendrites of hippocampal neurons, localizes to dendritic ribonucleoprotein granules (By similarity) {ECO:0000250|UniProtKB:Q8K3X0, ECO:0000269|PubMed:15166247, ECO:0000269|PubMed:17652158}
Tissue Location	Widely expressed. Overexpressed in breast cancers and metastasis, as well as in gastric cancers

Background

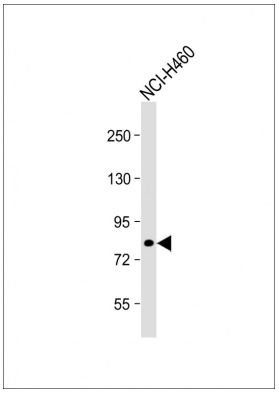
Component of the dendritic ribonucleoprotein particles (RNPs) in hippocampal neurons. May play a role in mRNA transport.

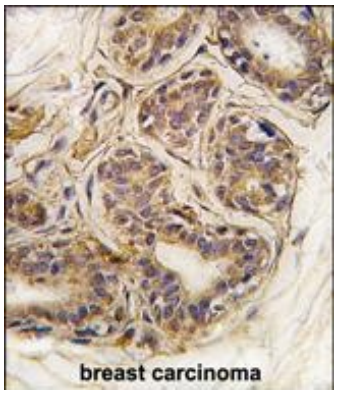
References

Macchi,P., J. Neurosci. 23 (13), 5778-5788 (2003)
Degot,S., Oncogene 21 (28), 4422-4434 (2002)

Images

Anti-CASC3 Antibody (Y181) at 1:1000 dilution + NCI-H460 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 76 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with CASC3 Antibody (Y181) (Cat.#AP7264d), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.