

Phospho-CASC3(Y181) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3681a**Specification****Phospho-CASC3(Y181) Antibody Blocking peptide
- Product Information**Primary Accession [O15234](#)
Other Accession [NP_619601](#)**Phospho-CASC3(Y181) Antibody Blocking peptide
- 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

The synthetic peptide sequence used to generate the antibody [AP3681a](/products/AP3681a) was selected from the region of human Phospho-CASC3-Y181. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Phospho-CASC3(Y181) Antibody Blocking peptide
- Protein Information****Phospho-CASC3(Y181) Antibody Blocking peptide - Background**

CASC3 is a component of the dendritic ribonucleoprotein particles (RNPs) in hippocampal neurons. It may play a role in mRNA transport.

Phospho-CASC3(Y181) Antibody Blocking peptide - References

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

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

Phospho-CASC3(Y181) Antibody Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)