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TSEN2 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP19095a

Specification

TSEN2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q8NCE0

TSEN2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 80746

Other Names
tRNA-splicing endonuclease subunit Sen2, tRNA-intron endonuclease Sen2, HsSen2, TSEN2, SEN2

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.

TSEN2 Antibody (N-term) Blocking Peptide - Protein Information

Name TSEN2

Synonyms SEN2

Function
Constitutes one of the two catalytic subunit of the tRNA- splicing endonuclease complex, a complex responsible for identification and cleavage of the splice sites in pre-tRNA. It cleaves pre-tRNA at the 5'- and 3'-splice sites to release the intron. The products are an intron and two tRNA half-molecules bearing 2',3'-cyclic phosphate and 5'-OH termini. There are no conserved sequences at the splice sites, but the intron is invariably located at the same site in the gene, placing the splice sites an invariant distance from the constant structural features of the tRNA body. Isoform 1 probably carries the active site for 5'-splice site cleavage. The tRNA splicing endonuclease is also involved in mRNA processing via its association with pre-mRNA 3'-end processing factors, establishing a link between pre-tRNA splicing and pre-mRNA 3'-end formation, suggesting that the endonuclease subunits function in multiple RNA-processing events. Isoform 2 is responsible for processing a yet unknown RNA substrate. The complex containing isoform 2 is not able to cleave pre-tRNAs properly, although it retains endonucleolytic activity.

Cellular Location
Nucleus. Nucleus, nucleolus. Note=May be transiently localized in the nucleolus

Tissue Location
Isoform 1 and isoform 2 are widely expressed at very low level.

TSEN2 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

TSEN2 Antibody (N-term) Blocking Peptide - Images

TSEN2 Antibody (N-term) Blocking Peptide - Background

This gene encodes one of the subunits of the tRNA splicingendonuclease. This endonuclease catalyzes the first step in RNAsplicing which is the removal of introns. Mutations in this genehave been associated with pontocerebellar hypoplasia type 2. Apseudogene has been identified on chromosome 4. Multiple transcriptvariants encoding different isoforms have been found for this gene.

TSEN2 Antibody (N-term) Blocking Peptide - References

Weitzer, S., et al. Nature 447(7141):222-226(2007)Lamesch, P., et al. Genomics 89(3):307-315(2007)Ballif, B.A., et al. Mol. Cell Proteomics 3(11):1093-1101(2004)Paushkin, S.V., et al. Cell 117(3):311-321(2004)Nakayama, M., et al. Genome Res. 12(11):1773-1784(2002)