

**TSEN2 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP19095A**

### Specification

#### TSEN2 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	<a href="#">Q8NCE0</a>
Other Accession	<a href="#">NP_001138864.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	53247
Antigen Region	16-43

#### TSEN2 Antibody (N-term) - Additional Information

##### Gene ID 80746

##### Other Names

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

##### Target/Specificity

This TSEN2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 16-43 amino acids from the N-terminal region of human TSEN2.

##### Dilution

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

TSEN2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### TSEN2 Antibody (N-term) - 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. Nucleolus. Note=May be transiently localized in the nucleolus

#### Tissue Location

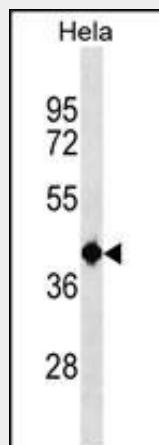
Isoform 1 and isoform 2 are widely expressed at very low level.

#### TSEN2 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### TSEN2 Antibody (N-term) - Images



TSEN2 Antibody (N-term) (Cat. #AP19095a) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the TSEN2 antibody detected the TSEN2 protein (arrow).

#### TSEN2 Antibody (N-term) - Background

This gene encodes one of the subunits of the tRNA splicing

endonuclease. This endonuclease catalyzes the first step in RNA splicing which is the removal of introns. Mutations in this gene have been associated with pontocerebellar hypoplasia type 2. A pseudogene has been identified on chromosome 4. Multiple transcript variants encoding different isoforms have been found for this gene.

**TSEN2 Antibody (N-term) - 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)