Product Name: TSEN54 Rabbit Polyclonal Antibody
Catalog #: APRab19355
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	60kDa

Antigen Information

Gene Name	TSEN54
Alternative Names	TSEN54; SEN54; tRNA-splicing endonuclease subunit Sen54; SEN54 homolog; HsSEN54; tRNA-intron endonuclease Sen54
Gene ID	283989.0
SwissProt ID	Q7Z6J9
Immunogen	The antiserum was produced against synthesized peptide derived from human TSEN54. AA range:261-310

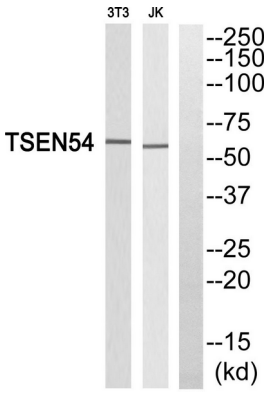
Background

This gene encodes a subunit of the tRNA splicing endonuclease complex, which catalyzes the removal of introns from precursor tRNAs. The complex is also implicated in pre-mRNA 3-prime end processing. Mutations in this gene result in pontocerebellar hypoplasia type 2.[provided by RefSeq, Oct 2009],disease:Defects in TSEN54 are the cause of pontocerebellar hypoplasia type 2A (PCH2A) [MIM:277470]. PCH type 2 is characterized by progressive microcephaly from birth combined with extrapyramidal dyskinesia and chorea, epilepsy, and normal spinal cord findings.,disease:Defects in TSEN54 are the cause of pontocerebellar hypoplasia type 4 (PCH4) [MIM:225753]. Pontocerebellar hypoplasia (PCH) is a heterogeneous group of disorders characterized by an abnormally small cerebellum and brainstem. PCH4 is characterized by severe course and early lethality.,function:Non-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. 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.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the SEN54 family.,subcellular location:May be transiently localized in the nucleolus.,subunit:tRNA splicing endonuclease is a heterotetramer composed of SEN2, SEN15, SEN34/LENG5 and SEN54. tRNA splicing endonuclease complex also contains proteins of the Pre-mRNA 3' end processing machinery such as CLP1, CPSF1, CPSF4 and CSTF2. Also belongs to a complex containing isoform 2 of SEN2.,

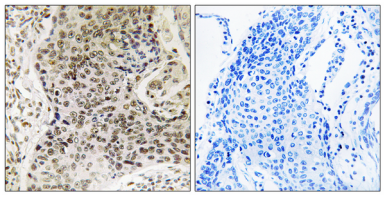
Research Area

Translation; tRNAs; Epigenetics and Nuclear Signaling; DNA / RNA; RNA Processing Splicing

Image Data



Western blot analysis of TSEN54 Antibody. The lane on the right is blocked with the TSEN54 peptide.



Immunohistochemistryt analysis of paraffin-embedded human lung carcinoma, using TSEN54 Antibody. The lane on the right is blocked with the TSEN54 peptide.