tRNA 剪接内切酶 2 抗体

产品货号： mlR9735

英文名称： TSEN2

中文名称： tRNA 剪接内切酶 2 抗体

别　　名： HsSen2; MGC2776; MGC4440; SEN2; SEN2L; tRNA intron endonuclease Sen2; tRNA splicing endonuclease 2 homolog (SEN2, S. cerevisiae); tRNA splicing endonuclease subunit Sen2; TSEN 2; SEN2_HUMAN.

研究领域： 细胞生物　免疫学　细胞周期蛋白　细胞分化　表观遗传学

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Dog, Cow, Horse, Sheep,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:50-200（石蜡切片需做抗原修复）
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

分 子 量： 53kDa

细胞定位： 细胞核

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human TSEN2:1-100/465

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

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Good elisakit producers

保存条件 ： Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed : PubMed

产品介绍 ： The tRNA-splicing endonuclease complex is responsible for identifying and cleaving pre-tRNA at both 5’ and 3’ splice sites, thereby releasing introns and free tRNA molecules with 2',3' cyclic phosphates and 5'-OH termini. In addition to its role in pre-tRNA splicing, the heterotetrameric endonuclease complex participates in mRNA processing and, via its association with pre-mRNA processing factors, is thought to link pre-tRNA and pre-mRNA splicing events. TSEN2 (tRNA-splicing endonuclease subunit Sen2), also known as tRNA-intron endonuclease Sen2, is a 465 amino acid nuclear protein that constitutes one of the two catalytic subunits of the tRNA-splicing endonuclease complex. There are three isoforms of TSEN2 that are produced as a result of alternative splicing events. Isoform 1 seems to carry the active site for 5’-splice site cleavage. Defects in the gene encoding TSEN2 are the cause of pontocerebellar hypoplasia type 2B, which is characterized by progressive microencephaly with epilepsy, extrapyramidal dyskinesia and chorea without spinal cord findings.

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.

Subunit:

tRNA splicing endonuclease is a heterotetramer composed of isoform 1 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. Isoform 2 belongs to a different complex that contains SEN54 but low level of SEN15 and SEN34/LENG5.

Subcellular Location:

Nucleus

Tissue Specificity:

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

Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR.

DISEASE:

Defects in TSEN2 are the cause of pontocerebellar hypoplasia type 2B (PCH2B) [MIM:612389]. Pontocerebellar hypoplasia (PCH) is a heterogeneous group of disorders characterized by an abnormally small cerebellum and brainstem. PCH type 2 is characterized by progressive microcephaly from birth combined with extrapyramidal dyskinesia and chorea, epilepsy, and normal spinal cord findings.

Similarity:

Belongs to the tRNA-intron endonuclease family.

SWISS:

Q8NCE0

Gene ID:

80746

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

产品图片