abcam

Product datasheet

Anti-TSEN54 antibody [EPR10062] ab178696

Recombinant RabMAb

1 References 4 Images

Overview

Product name Anti-TSEN54 antibody [EPR10062]

Description Rabbit monoclonal [EPR10062] to TSEN54

Host species Rabbit

Tested applications Suitable for: WB, ICC/IF, IHC-P

Unsuitable for: Flow Cyt or IP

Reacts with: Human Species reactivity

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide within Human TSEN54 aa 1-100 (Cysteine residue). The exact sequence is

proprietary.

Database link: Q7Z6J9

Positive control MCF7, 293T and Y79 cell lysates; Human pancreas tissue; MCF7 cells.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

Protein A purified **Purity**

Clone number Monoclonal EPR10062

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab178696 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 59 kDa.
ICC/IF		1/100 - 1/250.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes

Is unsuitable for Flow Cyt or IP.

Target

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.

Involvement in 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.

Defects in TSEN54 are the cause of pontocerebellar hypoplasia type 2A (PCH2A) [MIM:277470]. 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.

Sequence similarities

Belongs to the SEN54 family.

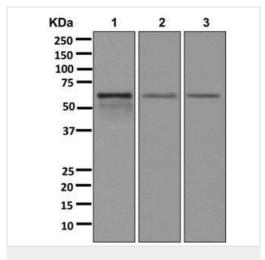
Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization

Nucleus. Nucleus > nucleolus. May be transiently localized in the nucleolus.

Images



Western blot - Anti-TSEN54 antibody [EPR10062] (ab178696)

All lanes : Anti-TSEN54 antibody [EPR10062] (ab178696) at 1/1000 dilution

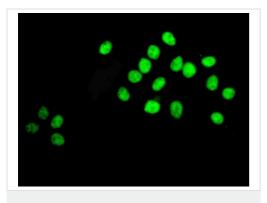
Lane 1 : MCF7 cell lysate

Lane 2 : 293T cell lysate

Lane 3 : Y79 cell lysate

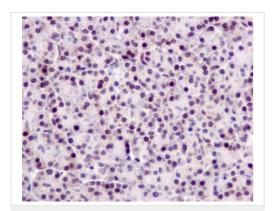
Lysates/proteins at 10 µg per lane.

Predicted band size: 59 kDa



Immunocytochemistry/ Immunofluorescence - Anti-TSEN54 antibody [EPR10062] (ab178696)

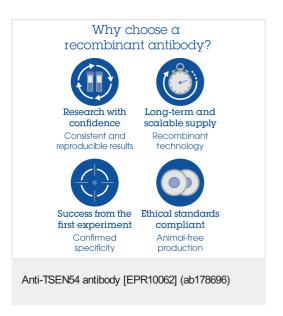
Immunofluorescent analysis of MCF7 cells labeling TSEN54 with ab178696 at 1/100 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TSEN54 antibody
[EPR10062] (ab178696)

Immunohistochemical analysis of paraffin-embedded Human pancreas tissue labeling TSEN54 with ab178696 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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