

PTER Antibody

Catalog # ASC10909

Specification

PTER Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, E <u>O96BW5</u> <u>CAH73146</u>, <u>55664514</u> Human, Mouse, Rat Rabbit Polyclonal IgG PTER antibody can be used for detection of PTER by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL.

PTER Antibody - Additional Information

Gene ID Target/Specificity PTER;

9317

Reconstitution & Storage

PTER antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions PTER Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PTER Antibody - Protein Information

Name PTER {ECO:0000303|PubMed:39112712, ECO:0000312|HGNC:HGNC:9590}

Function

N-acetyltaurine hydrolase that regulates feeding by catalyzing the hydrolysis of N-acetyltaurine into taurine and acetate (PubMed:39112712). N-acetyltaurine has anorexigenic and anti-obesity effects that are dependent on GFRAL receptor and GDF15 (By similarity). PTER also acts on other N-acetyl amino acids (Met, Ile, Leu, Val) and N-propionyltaurine, but at lower rates (By similarity).

Cellular Location Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q60866}



PTER Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PTER Antibody - Images



Western blot analysis of PTER in human kidney tissue lysate with PTER antibody at (A) 1 and (B) 2 μ g/mL.



Immunohistochemistry of PTER in mouse kidney tissue with PTER antibody at 2.5 µg/mL.

PTER Antibody - Background

PTER Antibody: PTER is a mammalian homolog to bacterial phosphotriesterases, enzymes that hydrolyze phosphotriester-containing organophosphate pesticides. It is expressed primarily in the proximal renal tubules and the gene has been localized in humans to chromosomal band 10p12 by in situ hybridization. PTER, in addition to FTO, MC4R, and NPC1 has recently been shown to be a new risk loci for early-onset and morbid adult obesity in European populations. At least two isoforms of PTER are known to exist.



PTER Antibody - References

Davies JA, Buchman VL, Krylova O, et al. Molecular cloning and expression pattern of rpr-1, a resiniferatoxin-binding, phosphotriesterase-related protein, expressed in rat kidney tubules. FEBS Lett.1997; 410:378-82.

Alimova-Kost MV, Imreh S, Buchman VL, et al. Assignment of phosphotriesterase-related gene (PTER) to human chromosome band 10p12 by in situ hybridization. Cytogenet.. Cell Genet.1998; 83:16-7.

Meyre D, Delplanque J, Chevre JC, et al. Genome-wide associated study for early-onset and morbid adult obesity identifies three new risk loci in European populations. Nat. Genet.2009; 41:157-9.