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Trehalase Rabbit pAb

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Catalog # AP56370

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O43280
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	66568
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Trehalase
Epitope Specificity	81-180/583
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane.
SIMILARITY	Sequence similaritiesBelongs to the glycosyl hydrolase 37 family.
DISEASE	Note=Deficiency of TREH results in isolated trehalose intolerance that causes gastrointestinal symptoms after ingestion of edible mushrooms.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Trehalase, also known as TREH, TREA or α,α-trehalose glucohydrolase, is a 583 amino acid protein belonging to the glycosyl hydrolase 37 family. Localizing to cell membrane and lipid-anchor, Trehalase is expressed in kidney, liver, and small intestine. Trehalase hydrolyses ingested trehalose, a disaccharide formed by two glucose molecules found mainly in insects, fungi, and plants, into cellular substrate glucose. Isolated trehalose intolerance due to deficiencies of Trehalase can result in gastrointestinal symptoms. Trehalase may also be a marker for renal tubular damage, and may contain an N-terminal signal peptide, five potential N-glycosylation sites, and a C-terminal hydrophobic region for glycosylphosphatidylinositol (GPI) attachment. Existing as two alternatively spliced isoforms, the gene encoding Trehalase maps to human chromosome 11q23.3.

Additional Information

Gene ID	11181
Other Names	Trehalase, 3.2.1.28, Alpha, alpha-trehalase, Alpha, alpha-trehalose glucohydrolase, TREH (HGNC:12266), TREA
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	TREH (HGNC:12266)
Synonyms	TREA
Function	Intestinal trehalase is probably involved in the hydrolysis of ingested trehalose.
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P19813}; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:P19813}
Tissue Location	Expressed in kidney, liver and small intestine. Also more weakly expressed in pancreas.

Background

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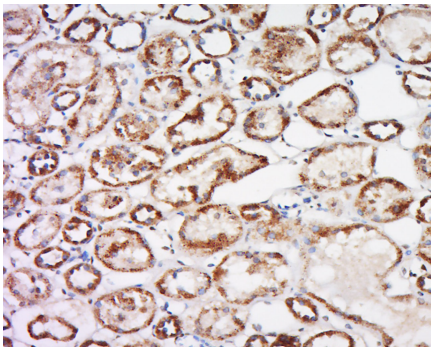
Images



Tissue/cell: Human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-Trehalase Polyclonal Antibody, Unconjugated(AP56370) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining