

Rabbit OTOP1 Polyclonal Antibody | anti-OTOP1 antibody

OTOP1 Antibody (Center)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA285832	Rabbit	Mouse (Predicted Reactivity: Rat)	Immunohistochemistry, ELISA, Western Blot

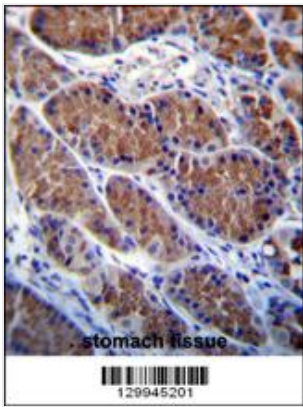
PRODUCT SYNONYMS

OTOP1; Polyclonal Antibody; OTOP1 Antibody (Center); Otopetrin-1; anti-OTOP1 antibody

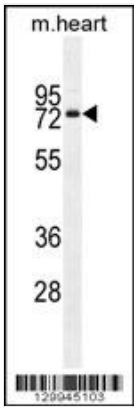
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse (Predicted Reactivity: Rat)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This OTOP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 360-388 amino acids from the Central region of human OTOP1.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Concentration	Vial Concentration: 0.5 (varies by lot)
Sequence Positions	360-388
Sequence Length	612
Applicable Applications for anti-OTOP1 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:Q80VM9};Multi-pass membrane protein. Note=Detectedin the gelatinous membrane overlying theinner ear macular epithelium.{ECO:0000250 UniProtKB:Q80VM9
Function	Proton-selective channel that specificallytransports protons into cells (PubMed:). Protonchannel activity is only weakly-sensitive to voltage (By similarity). Proton-selectivechannel activity is probably required in celltypes that use changes in intracellular pH forcell signaling or to regulate biochemical ordevelopmental processes (PubMed:). In thevestibular system of the inner ear, requiredfor the formation and function of otoconia,which are calcium carbonate crystals thatsense gravity and acceleration (By similarity).Probably acts by maintaining the pHappropriate for formation of otoconia (Bysimilarity). Regulates purinergic control ofintracellular calcium in vestibular supportingcells (By similarity). May be involved in sourtaste perception in sour taste cells bymediating entry of protons within the cytosol(By similarity). Also involved in energymetabolism, by reducing adipose tissueinflammation and protecting fromobesity-induced metabolic dysfunction (Bysimilarity).
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 Weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IHC (Immunohiostchemistry)
OTOP1 Antibody (Center) immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of OTOP1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



WB (Western Blot)
OTOP1 Antibody (Center) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the OTOP1 antibody detected the OTOP1 protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-OTOP1 antibody	OTOP1 is required for normal formation of otoconia in the inner ear. Inhibits P2Y purinoceptors. Modulates calcium homeostasis and influx of calcium in response to extracellular ATP (By similarity).
Product Categories/Family for anti-OTOP1 antibody	Signal Transduction
References	Hurle, B., et al. Hum. Mol. Genet. 12(7):777-789(2003)

NCBI AND UNIPROT INFORMATION

NCBI GI #	29725635
NCBI GeneID	133060
NCBI Accession #	NP_819056.1
NCBI GenBank Nucleotide #	NM_177998.1
UniProt Accession #	Q7RTM1; A1L476
Molecular Weight	67353
NCBI Official Full Name	otopetrin-1
NCBI Official Synonym Full Names	otopetrin 1
NCBI Official Symbol	OTOP1
NCBI Protein Information	otopetrin-1
UniProt Protein Name	Otopetrin-1
UniProt Gene Name	OTOP1
UniProt Entry Name	OTOP1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.