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Genethonin 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55139

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	O95210
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39007
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Genethonin 1
Epitope Specificity	1-100/358
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane. Distributed in the transverse tubules and/or near the junctional sarcoplasmic reticulum.
SIMILARITY	Contains 1 CBM20 (carbohydrate binding type-20) domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Genethonin-1 is a 358 amino acid single-pass type III membrane protein that contains one CBM20 (carbohydrate binding type-20) domain. A hydrophobic protein, Genethonin-1 is highly expressed in cardiac and skeletal muscle and is found at moderate levels in placenta and liver. Genethonin-1 and is thought to function in carbohydrate binding. The gene encoding Genethonin-1 maps to human chromosome 4, which represents approximately 6% of the human genome, contains nearly 900 genes and is associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

Additional Information

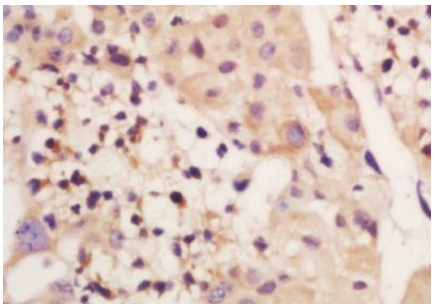
Gene ID	8987
Other Names	Starch-binding domain-containing protein 1, Genethonin-1, Glycophagy cargo receptor STBD1, STBD1 {ECO:0000303|PubMed:20810658}
Target/Specificity	Expressed at high level in skeletal and cardiac muscles. Moderately expressed in liver and placenta. No expression is found in pancreas, kidney or lung. Present in skeletal muscle, heart and placenta (at protein level).
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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	STBD1 {ECO:0000303|PubMed:20810658}
Function	Acts as a cargo receptor for glycogen. Delivers its cargo to an autophagic pathway called glycophagy, resulting in the transport of glycogen to lysosomes.
Cellular Location	Preautophagosomal structure membrane; Single-pass type III membrane protein. Endoplasmic reticulum membrane; Single-pass type III membrane protein. Cell membrane, sarcolemma, T-tubule. Note=Also detected near the junctional sarcoplasmic reticulum (PubMed:9794794) Concentrates at perinuclear structures (PubMed:21893048)
Tissue Location	Expressed at high level in skeletal and cardiac muscles. Moderately expressed in liver and placenta. No expression is found in pancreas, kidney or lung. Present in skeletal muscle, heart and placenta (at protein level).

Images



Tissue/cell: rat brain 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-Gemin 7 Polyclonal Antibody, Unconjugated(bs-13330R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining