

Genethonin 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55139

Specification

Genethonin 1 Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>095210</u>

Reactivity
Host
Clonality
Rat, Pig, Dog, Bovine
Rabbit
Polyclonal

Clonality Polyclo
Calculated MW 39 KDa
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.

Genethonin 1 Polyclonal Antibody - 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~~N/A<br \> <span class
="dilution_IHC-F">IHC-F~~N/A<br \> <span class
="dilution_IF">IF~~1:50~200<br \> ICC~~N/A<br \> E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 $^{\circ}$ 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 $^{\circ}$ C.

Genethonin 1 Polyclonal Antibody - 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).

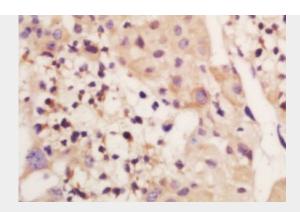
Genethonin 1 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Genethonin 1 Polyclonal Antibody - 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° C 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