

**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	<a href="#">O95210</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Genethonin 1
Epitope Specificity	1-100/358
<b>Purity</b>	
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  
IHC-F~N/A  
IF~1:50~200  
ICC~N/A  
E~N/A

**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.

**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)

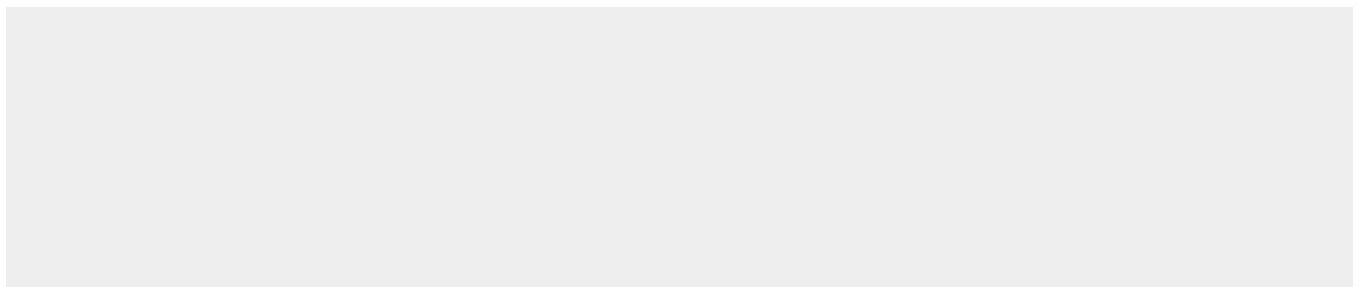
**Tissue Location**

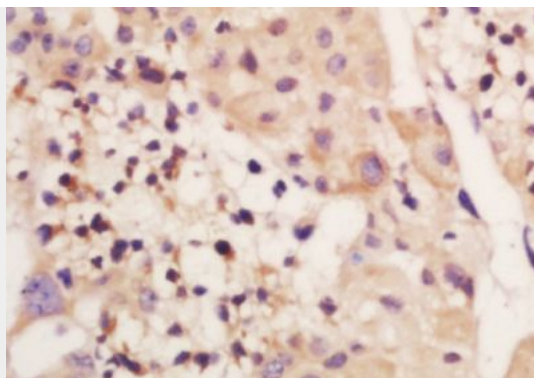
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**Genethonin 1 Polyclonal Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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