

# Genethonin 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55139

## **Product Information**

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

Primary Accession 095210

**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

**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

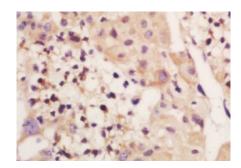
perinuclear structures (PubMed:21893048)

**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°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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.