

SLC20A2 Rabbit pAb

SLC20A2 Rabbit pAb Catalog # AP59048

Product Information

Application E

Primary Accession Q08357

Reactivity Rat, Pig, Rabbit, Chicken, Horse

Host Rabbit
Clonality Polyclonal
Calculated MW 70392
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human SLC20A2/PIT2

Epitope Specificity 51-150/652 **Isotype** IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cell membrane.

SIMILARITYBelongs to the inorganic phosphate transporter (PiT) (TC 2.A.20) family. **SUBUNIT**Homodimer.

DISEASE Defects in SLC20A2 are the cause of basal ganglia calcification, idiopathic, type

3 (IBGC3) [MIM:614540]. An autosomal dominant condition characterized by symmetric calcification in the basal ganglia and other brain regions. Affected

individuals can either be asymptomatic or show a wide spectrum of

neuropsychiatric symptoms, including parkinsonism, dystonia, tremor, ataxia, dementia, psychosis, seizures, and chronic headache. Serum levels of calcium,

phosphate, alkaline phosphatase and parathyroid hormone are normal.

This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions The SLC20 family transport proteins were originally identified as retroviral

receptors Glvr-1 and Ram-1, but are now designated sodium-dependent phosphate transporters 1 and 2 (PiT1 and PiT2). The PiT proteins function as sodium-phosphate cotransporters and are widely expressed, with high expression in bone, kidney and intestine. Both PiT1 and PiT2 are expressed on polarized epithelial cell membranes where they play a role in cellular phosphate homeostasis. PiT2 is a human receptor for amphotropic murine leukemia virus (A-MuLV). A-MuLV infects a variety of mammalian cell lines,

including humans, making it a useful tool in gene transfer technology and as a vector for gene therapy. Retroviral vector systems are used in gene therapy

that are designed to infect cells expressing PiT1 or PiT2.

Additional Information

Important Note

Gene ID 6575

Other Names Sodium-dependent phosphate transporter 2, Gibbon ape leukemia virus

receptor 2, GLVR-2, Phosphate transporter 2, PiT-2, Pit2, hPit2, Solute carrier

family 20 member 2, SLC20A2, GLVR2, PIT2

Target/Specificity Ubiquitously expressed.

Dilution ICC/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 SLC20A2

Synonyms GLVR2, PIT2

Function Sodium-phosphate symporter which preferentially transports the

monovalent form of phosphate with a stoichiometry of two sodium ions per phosphate ion (PubMed:12205090, PubMed:15955065, PubMed:16790504,

PubMed: 17494632, PubMed: 22327515, PubMed: 28722801,

PubMed:30704756). Plays a critical role in the determination of bone quality and strength by providing phosphate for bone mineralization (By similarity). Required to maintain normal cerebrospinal fluid phosphate levels (By similarity). Mediates phosphate-induced calcification of vascular smooth muscle cells (VCMCs) and can functionally compensate for loss of SLC20A1 in

VCMCs (By similarity).

Cellular Location Cell membrane; Multi-pass membrane protein. Apical cell membrane

{ECO:0000250|UniProtKB:Q63488}; Multi-pass membrane protein

Tissue Location Ubiquitously expressed.

Background

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