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# SLC20A2 Rabbit pAb

SLC20A2 Rabbit pAb
Catalog # AP59048

## Product Information

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| **Primary Accession** | Q08357 |
| **Reactivity** | Mouse |
| **Predicted** | Rat, Pig, Human, Rabbit, Chicken, Horse, Sheep |
| **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. |
| **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. |
| **Important Note** | 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

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| **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 |

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| **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

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| **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. |

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