

# Rabbit Anti-SLC20A2 antibody

SL8610R

Product Name:	SLC20A2
Chinese Name:	溶质载体蛋白家族20成员2抗体
Alias:	<ul> <li>Gibbon ape leukemia virus receptor 2; Gibbon leukemia virus receptor 2; GLVR 2;</li> <li>GLVR-2; GLVR2; hPit2; IBGC3; MLVAR; Murine leukemia virus amphotropic</li> <li>receptor; murine leukemia virus, amphotropic, receptor for; Phosphate transporter 2; PIT</li> <li>2; PiT-2; Pit2; RAM1; S20A2_HUMAN; SLC20A2; Sodium-dependent phosphate</li> <li>transporter 2; Solute carrier family 20 (phosphate transporter) member 2; solute carrier</li> <li>family 20 (phosphate transporter), member 2; Solute carrier family 20 member 2.</li> </ul>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	70kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SLC20A2/PIT2:51- 150/652 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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.

#### **Function:**

Sodium-phosphate symporter which seems to play a fundamental housekeeping role in phosphate transport by absorbing phosphate from interstitial fluid for normal cellular functions such as cellular metabolism, signal transduction, and nucleic acid and lipid synthesis. In vitro, sodium-dependent phosphate uptake is not significantly affected by acidic and alkaline conditions, however sodium-independent phosphate uptake occurs at acidic conditions. May play a role in extracellular matrix, cartilage and vascular calcification. Functions as a retroviral receptor and confers human cells susceptibility to infection to amphotropic murine leukemia virus (A-MuLV), 10A1 murine leukemia virus (10A1 MLV) and some feline leukemia virus subgroup B (FeLV-B) variants.

Subunit: Homodimer.

Subcellular Location: Cell membrane.

**Tissue Specificity:** Ubiquitously expressed.

### **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.

Similarity:

Belongs to the inorganic phosphate transporter (PiT) (TC 2.A.20) family.

SWISS: 008357

Gene ID:

## 6575

Database links:

Entrez Gene: 6575Human

Entrez Gene: 20516Mouse

Entrez Gene: 29502Rat

Omim: 158378Human

SwissProt: Q95L97Cat

SwissProt: Q08357Human

SwissProt: Q80UP8Mouse

SwissProt: Q63488Rat

Unigene: 653173Human

Unigene: 323901Mouse

Unigene: 378231Mouse

Unigene: 13642Rat

#### Important Note:

w. This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

