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Rabbit Anti-TRPM6 antibody

SL9048R

Product Name:	TRPM6
Chinese Name:	瞬时受体电位离子Channel protein6抗体（M亚家族）
Alias:	CHAK2; Channel kinase 2; HMGX; HOMG; HSH; Melastatin related TRP cation channel 6; Transient receptor potential cation channel subfamily M member 6; TRPM6_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,Horse,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:50-200（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	232kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TRPM6:701-800/2022<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:	TRPM6 is an essential ion channel and serine/threonine-protein kinase, and is crucial for magnesium homeostasis. TRPM6 also has an important role in epithelial magnesium transport and in the active magnesium absorption in the gut and kidney. The various isoforms of the type M6-kinase lack the ion channel region.

Function:
Essential ion channel and serine/threonine-protein kinase. Crucial for magnesium homeostasis. Has an important role in epithelial magnesium transport and in the active magnesium absorption in the gut and kidney. Isoforms of the type M6-kinase lack the ion channel region.

Subunit:
Forms heterodimers with TRPM7. TRPM6 requires the presence of TRPM7 to be targeted to the cell membrane (in HEK 293 cells). Interacts (via kinase domain) with GNB2L1/RACK1.

Subcellular Location:
Membrane; Multi-pass membrane protein.

Tissue Specificity:
Highly expressed in kidney and colon. Isoform TRPM6a and isoform TRPM6b, are coexpressed with TRPM7 in kidney, and testis, and are also found in several cell lines of lung origin. Isoform TRPM6c is detected only in testis and in H510 small cell lung carcinoma cells.

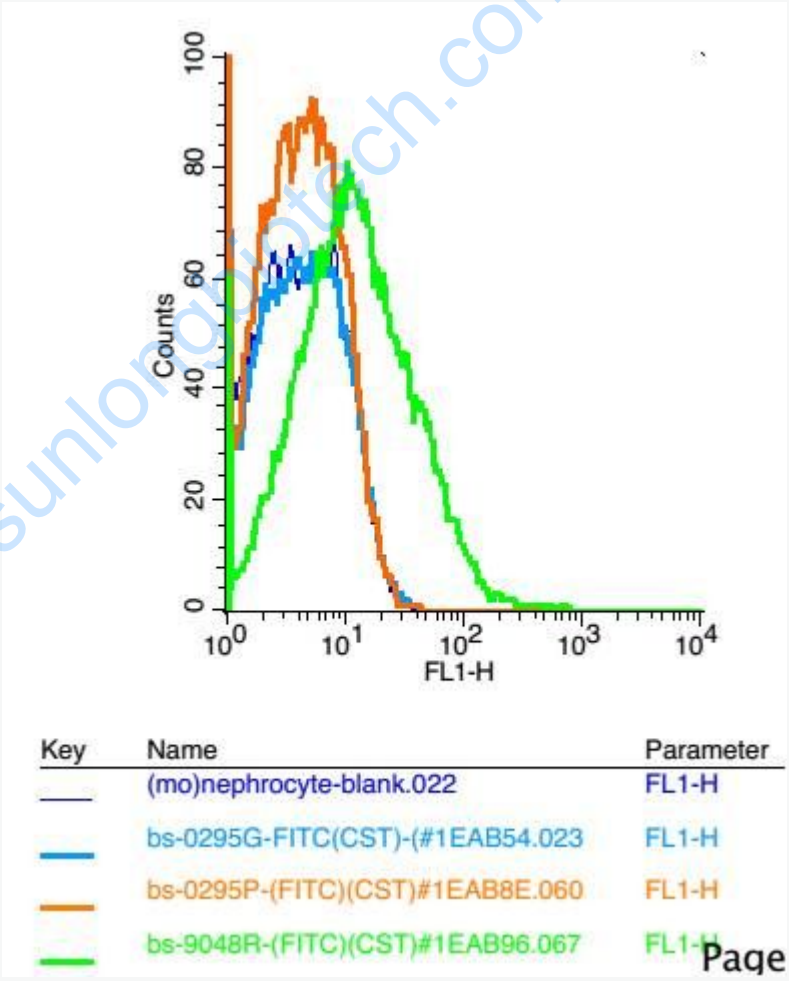
DISEASE:
Defects in TRPM6 are the cause of hypomagnesemia type 1 (HOMG1) [MIM:602014]; also known as hypomagnesemia with secondary hypocalcemia (HSH). HOMG1 is a disorder due to a primary defect in intestinal magnesium absorption. It is characterized by low levels of serum magnesium alongside with a normal renal magnesium secretion, secondary hypocalcemia and calcinocis. Affected individuals show neurologic symptoms of hypomagnesemic hypocalcemia, including seizures and muscle spasms, during infancy. Hypocalcemia is secondary to parathyroid failure resulting from magnesium deficiency. Untreated, the disorder may be fatal or may result in neurological damage.

Similarity:
In the C-terminal section; belongs to the protein kinase superfamily. Alpha-type protein kinase family. ALPK subfamily.
In the N-terminal section; belongs to the transient receptor (TC 1.A.4) family. LTrpC subfamily. TRPM6 sub-subfamily.
SWISS:
Q5VYG5

Gene ID:
140803

Database links:

Entrez Gene: 140803 Human

	Omim: 607009 Human SwissProt: Q5VYG5 Human SwissProt: Q96LV9 Human SwissProt: Q9BX84 Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Positive control: (mo)nephrocyte Isotype Control Antibody: Rabbit IgG ; Secondary Antibody: Goat anti-rabbit IgG-

	FITC, Dilution: 1:100 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 6μg in 100 μL1X PBS containing 0.5% BSA.