

## Rabbit Anti-TRPM6/APC Conjugated antibody

SL9048R-APC

<b>Product Name</b>	Anti-TRPM6/APC
<b>Chinese Name</b>	APC 标记的瞬时受体电位离子 Channel protein6 抗体 (M 亚家族)
<b>Alias</b>	CHAK2; Channel kinase 2; HMGX; HOMG; HSH; Melastatin related TRP cation channel 6; Transient receptor potential cation channel subfamily M member 6; TRPM6_HUMAN.
<b>Research Area</b>	Tumour Cell biology immunology Signal transduction Kinases and Phosphatases Channel protein
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Human(predicted:Mouse,Rat,Cow,Horse,Sheep)
<b>Applications</b>	ICC/IF=1:50-200,IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	232kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human TRPM6
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Storage</b>	
<b>Product Detail</b>	<b>background:</b> 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 calcinosis. 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.

**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.