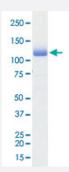


Bioactive

# TRPM7 (Human) Recombinant Protein

Catalog # P5520 Size 5 ug

## **Applications**



### Result of activity analysis

Result of activity analysis

Specification	
Product Description	Human TRPM7 (NP_060142.3, 1158 a.a 1865 a.a.) partial recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	107
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	99 % by SDS-PAGE/CBB staining



### **Product Information**

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluoresce nce-labeled substrate and Mg(or Mn)/ATP. The phosphorylated and unphosphorylated substrates we re separated and detected by LabChip 3000. Substrate: EEF2Ktide. ATP: 1000 uM
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCI, 150 mM NaCl, pH 7.5 (0.1% CHAPS, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

# Applications

- Functional Study
- SDS-PAGE

Gene Info — TRPM7	
Entrez GenelD	<u>54822</u>
Protein Accession#	NP_060142.3
Gene Name	TRPM7
Gene Alias	CHAK, CHAK1, FLJ20117, FLJ25718, LTRPC7, TRP-PLIK
Gene Description	transient receptor potential cation channel, subfamily M, member 7
Omim ID	<u>105500</u> <u>605692</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	TRPCs, mammalian homologs of the Drosophila transient receptor potential (trp) protein, are ion channels that are thought to mediate capacitative calcium entry into the cell. TRP-PLIK is a protein that is both an ion channel and a kinase. As a channel, it conducts calcium and monovalent cations to depolarize cells and increase intracellular calcium. As a kinase, it is capable of phosphorylating itself and other substrates. The kinase activity is necessary for channel function, as shown by it s dependence on intracellular ATP and by the kinase mutants. [supplied by OMIM
Other Designations	LTRPC ion channel family member 7



#### Disease

- Adenoma
- Adenomatous Polyps
- Amyotrophic lateral sclerosis
- Brain Ischemia
- Colonic Polyps
- Colorectal Neoplasms
- Dementia
- Diabetes Mellitus
- Genetic Predisposition to Disease
- Hyperplasia
- Parkinson Disease
- Stroke