
Recombinant human TRPM5 protein, N-GST&C-His

Catalog Number: bs-42426P

Concentration: >0.5mg/ml

Species: Human

AA Seq: 1-350/1165

Predicted MW: 66.8

Tags: N-GST&C-His

Endotoxin: Not analyzed

Purity: >90% as determined by SDS-PAGE

Purification: AC

Form: Liquid

Storage: 20mM Tris-HCl (pH=8.0) with 150mM NaCl & 4M Urea

Stored at -70°C or -20°C. Avoid repeated freeze/thaw cycles.

Background: Voltage-modulated Ca(2+)-activated, monovalent cation channel (VCAM) that mediates a transient membrane depolarization and plays a central role in taste transduction. Monovalent-specific, non-selective cation channel that mediates the transport of Na(+), K(+) and Cs(+) ions equally well. Activated directly by increases in intracellular Ca(2+), but is impermeable to it. Gating is voltage-dependent and displays rapid activation and deactivation kinetics upon channel stimulation even during sustained elevations in Ca(2+). Also activated by a fast intracellular Ca(2+) increase in response to inositol 1,4,5-triphosphate-producing receptor agonists. The channel is blocked by extracellular acidification. External acidification has 2 effects, a fast reversible block of the current and a slower irreversible enhancement of current inactivation. Is a highly temperature-sensitive, heat activated channel showing a steep increase of inward currents at temperatures between 15 and 35 degrees Celsius. Heat activation is due to a shift of the voltage-dependent activation curve to negative potentials. Activated by arachidonic acid in vitro. May be involved in perception of bitter, sweet and umami tastes. May also be involved in sensing semiochemicals.

VALIDATION IMAGES



The purity of the protein is greater than 90% as determined by reducing SDS-PAGE.