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## 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

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