

#### OriGene Technologies, Inc.

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# **Product datasheet for TA500368**

## TRPM4 Mouse Monoclonal Antibody [Clone ID: OTI14C3]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI14C3
Applications: IHC, WB

**Recommend Dilution:** WB 1:1000, IHC 1:50

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full-length protein expressed in 293T cell transfected with human TRPM4 expression vector

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.7 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

**Predicted Protein Size:** 134.3 kDa

**Gene Name:** transient receptor potential cation channel subfamily M member 4

Database Link: NP 060106 Entrez Gene 54795 Human

**Background:** Calcium-activated non selective (CAN) cation channel that mediates membrane

depolarization. While it is activated by increase in intracellular Ca(2+), it is impermeable to it. Mediates transport of monovalent cations (Na(+) > K(+) > Cs(+) > Li(+)), leading to depolarize the membrane. It thereby plays a central role in cadiomyocytes, neurons from entorhinal cortex, dorsal root and vomeronasal neurons, endocrine pancreas cells, kidney epithelial cells, cochlea hair cells etc. Participates in T-cell activation by modulating Ca(2+) oscillations after T lymphocyte activation, which is required for NFAT-dependent IL2 production. Involved in myogenic constriction of cerebral arteries. Controls insulin secretion in pancreatic betacells. May also be involved in pacemaking or could cause irregular electrical activity under

conditions of Ca(2+) overload

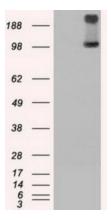
Synonyms: hTRPM4; LTrpC4; PFHB1B; TRPM4B

**Protein Families:** Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane

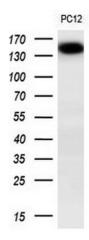




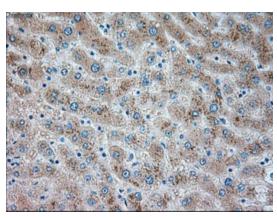
### **Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY TRPM4 ([RC216888], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TRPM4. Positive lysates [LY413636] (100ug) and [LC413636] (20ug) can be purchased separately from OriGene.

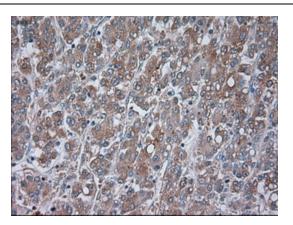


Western blot analysis of extracts (10ug) from 1 cell line by using anti-TRPM4 monoclonal antibody (1:200).



Immunohistochemical staining of paraffinembedded liver tissue within the normal limits using anti-TRPM4mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500368, Dilution 1:50)





Immunohistochemical staining of paraffinembedded Carcinoma of liver tissue using anti-TRPM4mouse monoclonal antibody. (Heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500368, Dilution 1:50)