

## Product datasheet

## Anti-TRPM4 antibody [OTI10H5] ab123936

1 References [画像数 7](#)

## 製品の概要

製品名	Anti-TRPM4 antibody [OTI10H5]
製品の詳細	Mouse monoclonal [OTI10H5] to TRPM4
由来種	Mouse
アプリケーション	適用あり: WB, IHC-P
種交差性	交差種: Dog, Human, African green monkey
免疫原	Recombinant full length protein corresponding to Human TRPM4 aa 1-1214. Produced in HEK-293T cells (NP_060106). Sequence:  MVVPEKEQSWIPKIFKKKTCTTFIVDSTDGGTLQCGRPRT AHPAVAME DAFGAAVVTWVDSDAHTTEKPTDAYGELDFTGAGRKHNSNFLR LSDRTDPA AVYSLVTRTWGFRAPNLVVSVLGGSGGPVLQTWLQDLLRRGL VRAAQSTG AWIVTGGLHTGIGRHGVAVRDHQMASTGGTKVVAMGVAPWG VVRNRDTL INPKGSFPARYWRGDPEDGVQFPLDYNYSAFFLVDDGTHGC LGGENRFR LRLESYISQQKTGVGGTGIDIPVLLLLIDGDEKMLTRIENAT QAQLPCLL VAGSGGAADCLAETLEDTLAPGSGGARQGEARDRIRRFFPKG DLEVLAQ VERIMTRKELLTVYSSSEDGSEEFETIVLKALVKACGSSEASA YLDELRLA VAWNRVDIAQSELFRGDIQWRSFHLEASLMDALLNDRPEFVR LLISHGLS LGHFLTPMRLAQLYSAAPSNSLIRNLLDQASHSAGTKAPALK GGAAELRP PDVGHVLRMLLGKMCAPRYPSGGAWDPHPGQGFGESMYLLSD KATSPLSL DAGLGQAPWSDLLLWALLLNRAQMAMYFWEMGSNAVSSALGA CLLLRVMA RLEPDAAAARRKDLAFKFEGMGVDLFGECYRSSEVRAARLL LRRCPLWG DATCLQLAMQADARAFFAQDGVQSLLTQKWWGDMASTTPPIWA

LVLAFFCP  
PLIYTRLITFRKSEEPTREELEFDMDSVINGEGPVGTADPA  
EKTPLGVP  
RQSGRPGCCGGRCGRRCLRRWFHFWGAPVTIFMGNVSYLL  
FLLLFSRV  
LLVDFQPAPPGLLELLYFWAFTLLCEELRQGLSGGGSLAS  
GGPGPGHA  
SLSQRRLYLADSWNQCDLVALTCFLGVGCRLTPGLYHLGR  
TVLCIDFM  
VFTVRLLHIFTVNKQLGPKIVIVSKMMKDVFVFFLFFLGWLV  
AYGVATEG  
LLRPRDSDFPSILRRVFYRPYLQIFGQIPQEDMDVALMEHSN  
CSSEPGFW  
AHPPGAQAGTCVSQYANLWVLLLVIFLLVANILLVNLLIAM  
FSYTFGKV  
QGNSDLYWKAQRYRLIREFHSRPALAPPFIVISHLRLLRQL  
CRRPRSPQ  
PSSPALEHFRVYLSKEAERKLLTWESVHKENFLLARARDKRE  
SDSERLKR  
TSQKVDLALKQLGHIREYEQRLKVLEREVQQCSRVLGWVAEA  
LSRSALLP PGGPPPDLPGSKD

Database link: [Q8TD43](#)

 [Run BLAST with](#)

 [Run BLAST with](#)

#### ポジティブ・コントロール

WB: HEK-293T cells transfected with pCMV6-ENTRY TRPM4 cDNA; HepG2, HeLa, HT-29, COS-7, Jurkat, MDCK and MCF7 cell extracts. IHC-P: Human kidney, liver, liver carcinoma, ovary and pancreas tissues.

#### 特記事項

Clone OTI10H5 (formerly 10H5).

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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#### 製品の特性

##### 製品の状態

Liquid

##### 保存方法

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.  
Avoid freeze / thaw cycle.

##### バッファー

pH: 7.30

Preservative: 0.02% Sodium azide

Constituents: PBS, 1% BSA, 50% Glycerol

##### 精製度

Affinity purified

##### 特記事項(精製)

Purified from cell culture supernatant by affinity chromatography.

##### ポリ/モノ

モノクローナル

クローン名	OTI10H5
アイソタイプ	IgG1

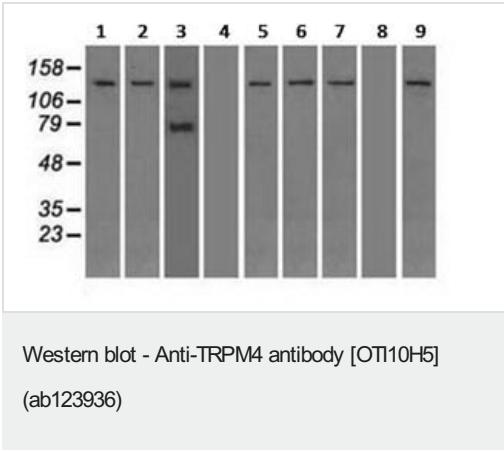
## アプリケーション

The Abpromise guarantee		Abpromise保証は、次のテスト済みアプリケーションにおけるab123936の使用に適用されます
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。		
アプリケーション	Abreviews	特記事項
WB		1/5000 - 1/10000. Predicted molecular weight: 134 kDa.
IHC-P		1/50. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

## ターゲット情報

機能	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 cardiomyocytes, 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 beta-cells. May also be involved in pacemaking or could cause irregular electrical activity under conditions of Ca(2+) overload. Affects T-helper 1 (Th1) and T-helper 2 (Th2) cell motility and cytokine production through differential regulation of calcium signaling and NFATC1 localization. Enhances cell proliferation through up-regulation of the beta-catenin signaling pathway.
組織特異性	Widely expressed with a high expression in intestine and prostate. In brain, it is both expressed in whole cerebral arteries and isolated vascular smooth muscle cells. Prominently expressed in Purkinje fibers. Expressed at higher levels in T-helper 2 (Th2) cells as compared to T-helper 1 (Th1) cells.
関連疾患	Defects in TRPM4 are the cause of progressive familial heart block type 1B (PFHB1B) [MIM:604559]. It is a cardiac bundle branch disorder characterized by progressive alteration of cardiac conduction through the His-Purkinje system, with a pattern of a right bundle-branch block and/or left anterior hemiblock occurring individually or together. It leads to complete atrio-ventricular block causing syncope and sudden death.
配列類似性	Belongs to the transient receptor (TC 1.A.4) family. LTrpC subfamily. TRPM4 sub-subfamily.
翻訳後修飾	Phosphorylation by PKC leads to increase the sensitivity to Ca(2+). Sumoylated. Desumoylated by SENP1.
細胞内局在	Endoplasmic reticulum. Golgi apparatus and Cell membrane. Endoplasmic reticulum. Golgi apparatus.

## 画像



**All lanes :** Anti-TRPM4 antibody [OTI10H5] (ab123936) at 1/5000 dilution

**Lane 1 :** HepG2 (Human liver hepatocellular carcinoma cell line) cell extract

**Lane 2 :** HeLa (Human epithelial cell line from cervix adenocarcinoma) cell extract

**Lane 3 :** HT-29 (Human colorectal adenocarcinoma cell line) cell extract

**Lane 4 :** A549 (Human lung carcinoma cell line) cell extract

**Lane 5 :** COS-7 (African green monkey kidney fibroblast-like cell line) cell extract

**Lane 6 :** Jurkat (Human T cell leukemia cell line from peripheral blood) cell extract

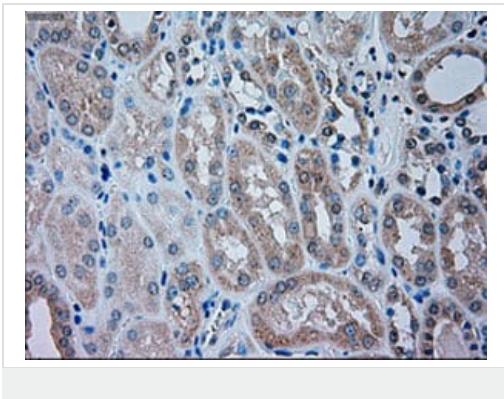
**Lane 7 :** MDCK (Canine kidney cell line) cell extract

**Lane 8 :** PC-12 (Rat adrenal gland pheochromocytoma cell line) cell extract

**Lane 9 :** MCF7 (Human breast adenocarcinoma cell line) cell extract

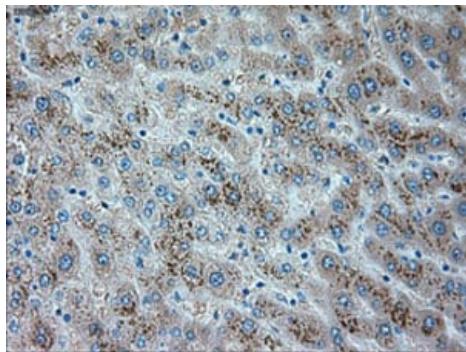
Lysates/proteins at 35 µg per lane.

**Predicted band size:** 134 kDa



Paraffin-embedded human kidney tissue stained for TRPM4 with ab123936 at a 1/50 dilution in immunohistochemical analysis. Heat-induced epitope retrieval by 10 mM citric buffer, pH 6.0, 100°C for 10 minutes.

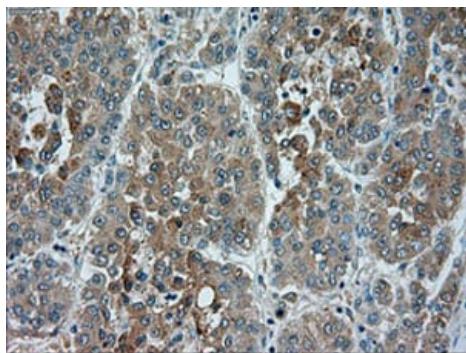
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPM4 antibody [OTI10H5] (ab123936)



Paraffin-embedded human liver tissue stained for TRPM4 with ab123936 at a 1/50 dilution in immunohistochemical analysis. Heat-induced epitope retrieval by 10 mM citric buffer, pH 6.0, 100°C for 10 minutes.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPM4 antibody

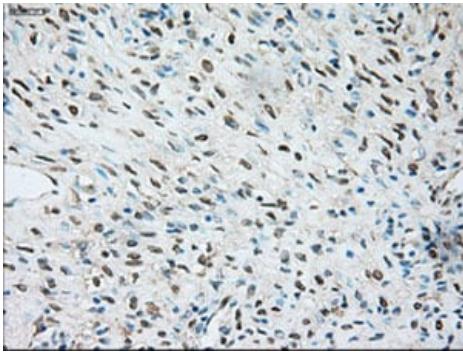
[OTI10H5] (ab123936)



Paraffin-embedded human liver carcinoma tissue stained for TRPM4 with ab123936 at a 1/50 dilution in immunohistochemical analysis. Heat-induced epitope retrieval by 10 mM citric buffer, pH 6.0, 100°C for 10 minutes.

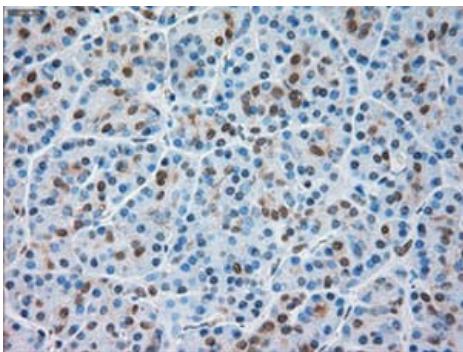
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPM4 antibody

[OTI10H5] (ab123936)



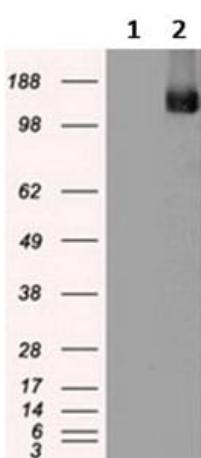
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPM4 antibody [OTI10H5] (ab123936)

Paraffin-embedded human ovary tissue stained for TRPM4 with ab123936 at a 1/50 dilution in immunohistochemical analysis. Heat-induced epitope retrieval by 10 mM citric buffer, pH 6.0, 100°C for 10 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPM4 antibody [OTI10H5] (ab123936)

Paraffin-embedded human pancreas tissue stained for TRPM4 with ab123936 at a 1/50 dilution in immunohistochemical analysis. Heat-induced epitope retrieval by 10 mM citric buffer, pH 6.0, 100°C for 10 minutes.



Western blot - Anti-TRPM4 antibody [OTI10H5] (ab123936)

**All lanes :** Anti-TRPM4 antibody [OTI10H5] (ab123936) at 1/5000 dilution

**Lane 1 :** HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cells transfected with pCMV6-ENTRY control cDNA

**Lane 2 :** HEK-293T cells transfected with pCMV6-ENTRY TRPM4 cDNA

Lysates/proteins at 5 µg per lane.

**Predicted band size:** 134 kDa

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