ARG22280
anti-TRPM7 / LTRPC7 antibody [S74-25]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [S74-25] recognizes TRPM7 / LTRPC7
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Specificity	Detects ~220kDa. No cross-reactivity against TrpM6.
Host	Mouse
Clonality	Monoclonal
Clone	S74-25
Isotype	IgG1
Target Name	TRPM7 / LTRPC7
Species	Mouse
Immunogen	Fusion protein around aa. 1817-1863 (C- terminus) of Mouse TrpM7
Conjugation	Un-conjugated
Alternate Names	Transient receptor potential cation channel subfamily M member 7; CHAK; ALSPDC; LTrpC7; LTRPC7; CHAK1; Channel-kinase 1; TRP-PLIK; EC 2.7.11.1; LTrpC-7; Long transient receptor potential channel 7

Application Instructions

Application table

Application	Dilution
ICC/IF	1:100
IHC-P	1:100
WB	1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

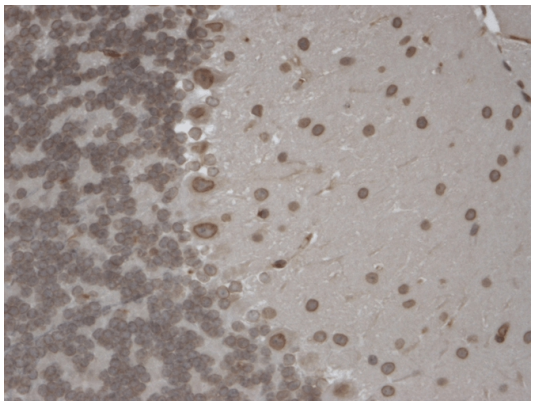
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.09% Sodium azide and 50% Glycerol
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

	cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

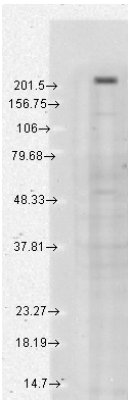
Database links	GeneID: 54822 Human GeneID: 58800 Mouse Swiss-port # Q923J1 Mouse Swiss-port # Q96QT4 Human
Gene Symbol	Trpm7
Gene Full Name	transient receptor potential cation channel, subfamily M, member 7
Background	The protein encoded by this gene is both an ion channel and a serine/threonine protein kinase. The kinase activity is essential for the ion channel function, which serves to increase intracellular calcium levels and to help regulate magnesium ion homeostasis. Defects in this gene are a cause of amyotrophic lateral sclerosis-parkinsonism/dementia complex of Guam. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jul 2014]
Function	Essential ion channel and serine/threonine-protein kinase. Divalent cation channel permeable to calcium and magnesium. Has a central role in magnesium ion homeostasis and in the regulation of anoxic neuronal cell death. Involved in TNF-induced necroptosis downstream of MLKL by mediating calcium influx. The kinase activity is essential for the channel function. May be involved in a fundamental process that adjusts plasma membrane divalent cation fluxes according to the metabolic state of the cell. Phosphorylates annexin A1 (ANXA1). [UniProt]
Calculated Mw	213 kDa
PTM	Autophosphorylated.
Cellular Localization	Membrane

Images



ARG22280 anti-TRPM7 / LTRPC7 antibody [S74-25] IHC image

Immunohistochemistry: 10% Formalin (12-24 hours at RT) fixed Mouse Brain slice stained with ARG22280 anti-TRPM7 / LTRPC7 antibody [S74-25] (brown) at 1:1000 dilution (1 hour). Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500uL for 5 minutes at RT.



ARG22280 anti-TRPM7 / LTRPC7 antibody [S74-25] WB image

Western blot: Human cell lysates stained with ARG22280 anti-TRPM7 / LTRPC7 antibody [S74-25] at 1:1000 dilution.