

For Research Use Only

# TRPM7 Polyclonal antibody

Catalog Number: 55251-1-AP

1 Publications



## Basic Information

Catalog Number:

55251-1-AP

Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM\_017672

GeneID (NCBI):

54822

UNIPROT ID:

Q96QT4

Full Name:

transient receptor potential cation channel, subfamily M, member 7

Calculated MW:

213 kDa

Observed MW:

220 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

## Applications

Tested Applications:

WB, ELISA

Cited Applications:

WB

Species Specificity:

human, mouse, rat

Cited Species:

mouse, rat

Positive Controls:

WB : SH-SY5Y cells, mouse brain tissue, rat brain tissue

## Background Information

Transient receptor potential melastatin 7 (TRPM7), along with the closely related TRPM6, are unique channels that have dual operations: cation permeability and kinase activity. In contrast to the limited tissue distribution of TRPM6, TRPM7 is widely expressed among tissues and is therefore implicated in a variety of cellular functions physiologically and pathophysiologically. The discovery of TRPM7's unique structure imparting dual ion channel and kinase activities shed light onto novel and peculiar biological functions, such as Mg<sup>2+</sup> homeostasis, cellular Ca<sup>2+</sup> flickering, and even intranuclear transcriptional regulation by a cleaved kinase domain translocated to nuclei. The calculated MW of TRPM7 is 213 kDa, 55251-1-AP can detect a band around 220 kDa. (PMID: 32503408)

## Notable Publications

Author	Pubmed ID	Journal	Application
Jiaxin Chen	39191357	Eur J Pharm Sci	WB

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

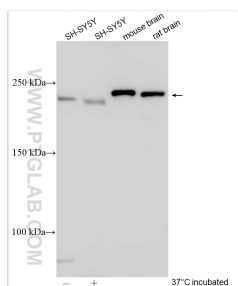
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 55251-1-AP (TRPM7 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.