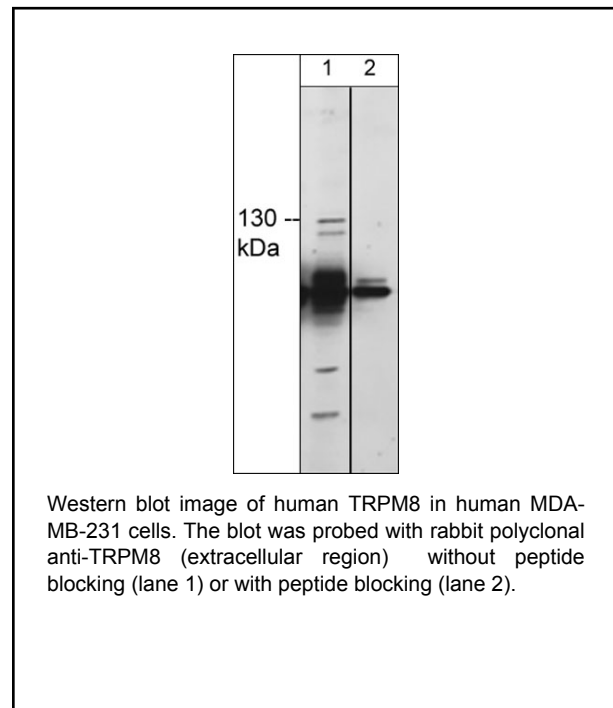


Background

The Transient Receptor Potential Melastatin (TRPM) subfamily of cation-permeable channels is ubiquitous in mammalian tissues. This family includes TRPM1-8. In addition to acting as a calcium-permeant channel, some TRPM family members, TRPM6 and TRPM7, possess serine/threonine kinase activity and autophosphorylation. TRPM8 is thermoactivated at mildly cold temperatures (>25°C), and can also be activated by compounds that cause a cooling sensation, such as menthol and icilin. TRPM8 is expressed in trigeminal and dorsal root ganglia neurons where it confers sensitivity to cold in the somatosensory system. In vascular smooth muscle, TRPM8 may alter blood flow by constricting or enlarging blood vessels. TRPM8 is also expressed in normal prostate epithelial cells, as well as overexpressed in several primary tumors including colon, lung, skin, breast, and prostate cancers.

Background References

Asuthkar, S. et al. (2014) J Biol Chem. 290(5):2659
Potapova, T.A. et al. (2014) Bull Exp Biol Med. 157(6):757
Bibaux, G. et al. (2015) Proc Natl Acad Sci. 112(26):E3345



Applications

Blocking 1:1000
ELISA 50 ng/well

End user should determine optimal dilution for their particular applications and experiments.
Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

Specificity

The peptide is specifically recognized by TRPM8 (Extracellular region), antibody (TP5701) in ELISA, and has been shown to block the reactivity of TP5701 in Western blot. In addition, the peptide is recommended for use in blocking TP5701 reactivity in immunocytochemistry.

*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

Peptide Sequence

TRPM8 synthetic peptide corresponding to amino acids in the extracellular region of human TRPM8. This site is well conserved in rat and mouse TRPM8, but has low homology to other TRPM family members.

Buffer and Storage

Blocking Peptide is supplied in 50µl phosphate-buffered saline and 0.05% sodium azide.
Store at -20°C. Stable for 1 year.

Related Products

TP5651 TRPM7 (Extracellular region) Rabbit Polyclonal
TP5691 TRPM7 (a.a. 1484-1497) Rabbit Polyclonal
TM5711 TRPM8 (Extracellular region) Mouse Monoclonal
TM5721 TRPM8 (Extracellular region) Mouse Monoclonal
TP5701 TRPM8 (Extracellular region) Rabbit Polyclonal

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