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Melittin
Synthetic Peptide
Catalog # SP2730b

Specification

Melittin - Product Information

Primary Accession	P68409
Other Accession	P68408, P59262, P01501, Q8LW54
Sequence	**NH2-GIGAVLKVLTTGLPALISWIKRKRQQ-CONH2**

Melittin - Additional Information

Other Names
Melittin, MELT

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Melittin - Protein Information

Name MELT

Function
Main toxin of bee venom with strong hemolytic activity and antimicrobial activity. It has enhancing effects on bee venom phospholipase A2 activity. This amphipathic toxin binds to negatively charged membrane surface and forms pore by inserting into lipid bilayers inducing the leakage of ions and molecules and the enhancement of permeability that ultimately leads to cell lysis. It acts as a voltage-gated pore with higher selectivity for anions over cations. The ion conductance has been shown to be voltage-dependent. Self- association of melittin in membranes is promoted by high ionic strength, but not by the presence of negatively charged lipids. In vivo, intradermal injection into healthy human volunteers produce sharp pain sensation and an inflammatory response. It produces pain by activating primary nociceptor cells directly and indirectly due to its ability to activate plasma membrane phospholipase A2 and its pore- forming activity.

Cellular Location
Secreted. Target cell membrane {ECO:0000250|UniProtKB:P01501}. Note=Alpha-helical peptides form toroidal pores in the prey {ECO:0000250|UniProtKB:P01501}

Tissue Location
Expressed by the venom gland.

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Melittin - Images