

## Waglerin 1

<b>Product name :</b> Waglerin 1	<b>Synonyms :</b>
<b>Catalog # :</b> 12WAG001	
<b>Product description</b>  Waglerin 1 (Wtx-1) is a peptide originally isolated from the venom of the Wagler's pit viper ( <i>Trimeresurus wagleri</i> ). This 22 amino-acid peptide is a competitive antagonist of muscle nicotinic acetylcholine receptors. Waglerin 1 binds selectively to epsilon subunit of nAChR. Some studies have demonstrated that Waglerin 1 has an effect on ionotropic GABA receptors. It may potentiate or depress I (GABA) depending on the neurons. Some derivatives of Waglerin 1 are currently used in cosmetics to reduce wrinkles.	
<b>Product specifications</b>  <b>AA sequence:</b> Gly-Gly-Lys-Pro-Asp-Leu-Arg-Pro-Cys <sup>9</sup> -His-Pro-Pro-Cys <sup>13</sup> -His-Tyr-Ile-Pro-Arg-Pro-Lys-Pro-Arg-OH <b>Disulfide bonds:</b> Cys <sup>9</sup> -Cys <sup>13</sup> <b>Length (aa):</b> 22 <b>Formula:</b> C <sub>112</sub> H <sub>173</sub> N <sub>37</sub> O <sub>26</sub> S <sub>2</sub> <b>Appearance:</b> White lyophilized solid <b>Molecular Weight:</b> 2520.20 Da <b>CAS number:</b> NA <b>Source:</b> Synthetic <b>Counterion:</b> TFA salts <b>Solubility:</b> Water or saline buffer, 5 mg/mL maximum (recommendation)	
<b>Formulation</b>  <b>Storage/Stability:</b> Shipped at ambient temperature under lyophilized powder. Store at -20°C (-4°F). Do not freeze-thaw. Aliquot sample if required and store at -80°C (-112°F). <b>Expiry date:</b> One year <b>Use restrictions:</b> For laboratory use only. Not for drug, household or other uses. Not for use in diagnostic or therapeutic procedures.	
<b>Related products</b> <ul style="list-style-type: none"> <li>• <a href="#">α-conotoxin MI - #08CON012</a>: blocks selectively alpha-delta site of the muscle acetylcholine receptor</li> <li>• <a href="#">α-conotoxin GI - #08CON005</a>: blocks alpha-delta site of the muscle acetylcholine receptor</li> <li>• <a href="#">α-conotoxin IMI - #08CON011</a>: α7 nAChR selective blocker</li> <li>• <a href="#">αC-conotoxin PrXA - #13CON016</a>: selective blocker of α1/β1/ε/δ and α1/β1/γ/δ nAChR subunits</li> </ul>	
<b>References</b> <ul style="list-style-type: none"> <li>• Sellin LC. <i>et al.</i> Conformational analysis of a toxic peptide from <i>Trimeresurus wagleri</i> which blocks the nicotinic acetylcholine receptor. <i>Biophys J.</i> 1996.</li> <li>• Molles BE. <i>et al.</i> Identification of residues at the alpha and epsilon subunit interfaces mediating species selectivity of Waglerin-1 for nicotinic acetylcholine receptors. <i>J Biol Chem.</i> 2002.</li> <li>• McArdle JJ. <i>et al.</i> Waglerin-1 selectively blocks the epsilon form of the muscle nicotinic acetylcholine receptor. <i>J Pharmacol Exp Ther.</i></li> <li>• Ye JH. <i>et al.</i> Waglerin-1 inhibits GABA(A) current of neurons in the nucleus accumbens of neonatal rats. <i>Brain Res.</i> 1999.</li> </ul>	

For laboratory research use only