

## Iberitoxin

<b>Product name:</b> Iberitoxin	<b>Synonyms :</b> IbTx
<b>Catalog # :</b> 12IBX001	
<b>Product description</b>	
<p>Iberitoxin (IbTx) is a toxin that was originally isolated from <i>Buthus tamulus</i> scorpion venom. Iberitoxin inhibits selectively the high conductance Ca<sup>2+</sup>-activated K<sup>+</sup> channel (K<sub>Ca</sub>1.1) at nanomolar concentrations (IC<sub>50</sub> ~ 2 nM). This toxin does not affect other types of calcium-dependent or voltage-dependent K<sup>+</sup> channels. Iberitoxin is a valuable tool to study specifically Maxi-K channels.</p>	
<b>Product specifications</b>	
<p><b>AA sequence:</b> pGlu-Phe-Thr-Asp-Val-Asp-Cys-Ser-Val-Ser-Lys-Glu-Cys-Trp-Ser-Val-Cys-Lys-Asp-Leu-Phe-Gly-Val-Asp-Arg-Gly-Lys-Cys-Met-Gly-Lys-Lys-Cys-Arg-Cys-Tyr-Gln-OH  <b>Disulfide bonds:</b> Cys<sup>7</sup>-Cys<sup>28</sup>, Cys<sup>13</sup>-Cys<sup>33</sup>, Cys<sup>17</sup>-Cys<sup>35</sup>  <b>Length (aa):</b> 37  <b>Formula:</b> C<sub>179</sub>H<sub>274</sub>N<sub>50</sub>O<sub>55</sub>S<sub>7</sub>  <b>Appearance:</b> White lyophilized solid  <b>Molecular Weight:</b> 4230.8 Da  <b>CAS number:</b> [129203-60-7]  <b>Source:</b> Synthetic  <b>Counterion:</b> TFA salts  <b>Solubility:</b> Water or saline buffer, 5 mg/mL maximum (recommendation)</p>	
<b>Formulation</b>	
<p><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.</p>	
<b>Related products</b>	
<ul style="list-style-type: none"> <li>• <a href="#">Charybdotoxin - #11CHA001</a>: blocks K<sub>Ca</sub>1.1, K<sub>Ca</sub>3.1, K<sub>v</sub>1.2, K<sub>v</sub>1.3 and K<sub>v</sub>1.6</li> <li>• <a href="#">Apamin - #08APA001</a>: selective blocker of K<sub>Ca</sub>2.1, K<sub>Ca</sub>2.2, and K<sub>Ca</sub>2.3</li> <li>• <a href="#">Leiurotoxin 1 - #10LEI001</a>: blocker of SK channels</li> <li>• <a href="#">Tamapin - #10TAM001</a>: selective blocker of SK2 (K<sub>Ca</sub>2.2) channels</li> <li>• <a href="#">Maurotoxin - #08MAR001</a>: blocks SK1, SK2, SK3, SK4 (IK<sub>Ca</sub>), K<sub>v</sub>1.1, K<sub>v</sub>1.2 and K<sub>v</sub>1.3</li> </ul>	
<b>References</b>	
<ul style="list-style-type: none"> <li>• Galvez A, <i>et al.</i> Purification and characterization of a unique, potent, peptidyl probe for the high conductance calcium-activated potassium channel from venom of the scorpion <i>Buthus tamulus</i>. <i>J Biol Chem</i>.</li> <li>• Giangiacomo KM, <i>et al.</i> Mechanism of iberitoxin block of the large-conductance calcium-activated potassium channel from bovine aortic smooth muscle. <i>Biochemistry</i>.</li> <li>• Kaczorowski GJ, <i>et al.</i> High-conductance calcium-activated potassium channels; structure, pharmacology, and function. <i>J Bioenerg Biomembr</i>.</li> <li>• Garcia ML, <i>et al.</i> Use of toxins to study potassium channels. <i>J Bioenerg Biomembr</i>.</li> <li>• Candia S., <i>et al.</i> Mode of action of iberitoxin, a potent blocker of the large conductance Ca(2+)-activated K+ channel. <i>Biophys J</i>.</li> </ul>	

For laboratory research use only