

## BmP02

Cat. No.:	HY-P5157
Molecular Formula:	C <sub>115</sub> H <sub>182</sub> N <sub>36</sub> O <sub>41</sub> S <sub>7</sub>
Molecular Weight:	2949.35
Sequence:	Val-Gly-Cys-Glu-Glu-Cys-Pro-Met-His-Cys-Lys-Gly-Lys-Asn-Ala-Lys-Pro-Thr-Cys-Asp-Asp-Gly-Val-Cys-Asn-Cys-Asn-Val (Disulfide bonds: Cys3-Cys19, Cys6-Cys24, Cys10-Cys26)
Sequence Shortening:	VGCECPMHCKGKNAKPTCDDGVCNCNV (Disulfide bonds: Cys3-Cys19, Cys6-Cys24, Cys10-Cys26)
Target:	Potassium Channel
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

### BIOLOGICAL ACTIVITY

Description	BmP02 is a selective Kv1.3 channel blocker and a highly-selective Kv4.2 modulator, which can be isolated from Chinese scorpion ( <i>Buthus martensi</i> Karsch) venom. BmP02 also delays the inactivation of Kv4.2 in HEK293T cells, with an EC <sub>50</sub> value of ~850 nM. BmP02 inhibits the transient outward potassium currents (I <sub>to</sub> ) in ventricular muscle cells <sup>[1][2]</sup> .
IC <sub>50</sub> & Target	Kv1.3, Kv4.2 <sup>[1]</sup>

### REFERENCES

[1]. Wu B, et al. Mapping the Interaction Anatomy of BmP02 on Kv1.3 Channel. *Sci Rep.* 2016 Jul 11;6:29431.

[2]. Wu B, et al. BmP02 Atypically Delays Kv4.2 Inactivation: Implication for a Unique Interaction between Scorpion Toxin and Potassium Channel. *Toxins (Basel).* 2016 Sep 27;8(10):280.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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