## PE 22-28

| Cat. No.:            | HY-P3581  |  |
|----------------------|---|--|
| CAS No.:             | 1801959-12-5  |  |
| Molecular Formula:   | $C_{35}H_{55}N_{11}O_{9}$   |  |
| Molecular Weight:    | 773.88  |  |
| Sequence Shortening: | GVSWGLR   |  |
| 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               | PE 22-28 is a TREK-1 inhibitor with IC <sub>50</sub> value of 0.12 nM. PE 22-28 also is a 7 amino-acid peptide that is used as a core sequence for preparing analogs by chemical modifications and also by substitution of amino-acids. PE 22-28 can be used for the research of depression <sup>[1]</sup> . |   |  |  |
| IC <sub>50</sub> & Target | IC50: 0.12 nM (TREK-1) <sup>[1]</sup>  |   |  |  |
| In Vitro                  | PE 22-28 displays good specificity and affinity for TREK-1 channel with IC <sub>50</sub> value of 0.12 nM <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.   |   |  |  |
| In Vivo                   | PE 22-28 (i.p.; 3.0μg/kg) shows antidepressant property <sup>[1]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only.  |   |  |  |
|                           | Animal Model:  | Naïve male C57Bl/6J mice <sup>[1]</sup>   |  |  |
|                           | Dosage:  | 3.0µg/kg  |  |  |
|                           | Administration:  | Intraperitoneal   |  |  |
|                           | Result:  | Showed a significant reduction of the immobility time, reduced significantly the latency to eat the food pellet, induced neurogenesis and improved the action duration. |  |  |
|                           |  |   |  |  |

## REFERENCES

[1]. Alaeddine Djillani, et al. Shortened Spadin Analogs Display Better TREK-1 Inhibition, In Vivo Stability and Antidepressant Activity. Front Pharmacol. 2017 Sep 12;8:643.

## Product Data Sheet



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

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