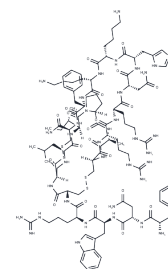


## Conopeptide rho-TIA

## Chemical Properties

CAS No. :	381725-58-2
Formula:	C105H160N36O21S4
Molecular Weight:	2390.88
Storage:	Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	Conopeptide rho-TIA, a peptide from <i>Conus tulipa</i> venom, acts as a selective, noncompetitive inhibitor at the human $\alpha$ 1B-Adrenergic Receptor and as a competitive inhibitor at the $\alpha$ 1A and $\alpha$ 1D-Adrenergic Receptors. Binding to these subtypes, conopeptide rho-TIA may inform the creation of new $\alpha$ 1-Adrenergic Receptor subtype-selective drugs [1].
Targets(IC50)	Adrenergic Receptor
In vitro	Conopeptide rho-TIA at a concentration of 100 nM applied for 24-48 hours interacts with human $\alpha$ 1B-Adrenergic Receptor non-competitively and reversibly, suggesting its potential role as an allosteric inhibitor [1]. At 30 nM for 2 hours, conopeptide rho-TIA acts as a non-competitive inhibitor for the $\alpha$ 1B-Adrenergic Receptor but competitively inhibits the $\alpha$ 1A and $\alpha$ 1D-Adrenergic Receptor subtypes [1]. Additionally, a single application of 10 $\mu$ M conopeptide rho-TIA inhibits the increase in cytoplasmic Ca <sup>2+</sup> concentration mediated by the $\alpha$ 1-Adrenergic Receptor activation by norepinephrine, without affecting the presynaptic $\alpha$ 2-Adrenergic Receptor-mediated responses [2].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.4183 mL	2.0913 mL	4.1826 mL
5 mM	0.0837 mL	0.4183 mL	0.8365 mL
10 mM	0.0418 mL	0.2091 mL	0.4183 mL
50 mM	0.0084 mL	0.0418 mL	0.0837 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

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