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**Product Data Sheet**

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Product Name: Robotnikinin

Cat. No.: GC18475

**Chemical Properties**

Cas. No. 1132653-79-2

Chemical Name N-[(4-chlorophenyl)methyl]-5,12-dioxo-2R-phenyl-1-oxa-4-azacyclododec-8E-ene-6S-acetamide

SMILES O=C1[C@H](CC(NCC2=CC=C(Cl)C=C2)=O)C/C=C/CCC(O[C@@H](CN1)C3=CC=CC=C3)=OFormula C<sub>25</sub>H<sub>27</sub>ClN<sub>2</sub>O<sub>4</sub>

M.Wt 455

Solubility DMF: Soluble,DMSO: 10 mM,Ethanol: Soluble Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

Sonic hedgehog (Shh) is the most widely characterized of the three vertebrate Hedgehog homologs, and is essential for proper embryonic development. Shh binds to its receptor, Patched (Ptch1), resulting in the de-repression of Smoothed. This leads to the activation of Gli2, which regulates the transcription of target genes that include Gli1 and Ptch1. Robotnikinin is the first identified small molecule inhibitor of Shh signaling that acts upstream of Smo, binding directly to Shh with a Kd value of 3.1 μM. Robotnikinin represses Gli-mediated transcription in primary human keratinocytes and synthetic human skin in a concentration-dependent manner.

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

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