# Product Data Sheet

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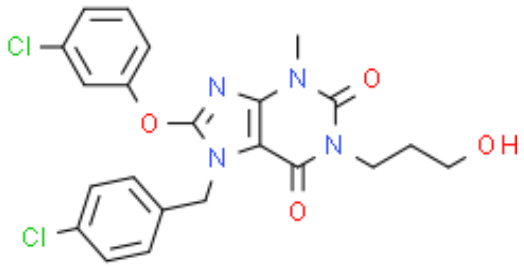
| Cas No.: | 1628291-95-1 | Cat. No: | PL12455 |
| Product Name: | HC-070 | | |
| Product synonym: | 化合物 T15465 | | |
| Chemical name: | HC-070 | | |
| MF: | C22H20CL2N4O4 | FW: | 475.32460308075 |
| Purity: | ≥99% | Batch No.: | - |
| Storage: | | | |
| Structural formula: |  | | |
| λmax： | - | Formulation： | - |
| Solubility : | | | |
| SMILES : | N1(CC2=CC=C(Cl)C=C2)C2=C(N(C)C(=O)N(CCCO)C2=O)N=C1OC1=CC=CC(Cl)=C1 | | |
| InChI Code: | - | | |
| InChI Key: | | | |
| **WARNING This product is not for human or veterinary use.** | | | |

## Product Description

HC-070 是一种瞬时受体电位通道蛋白 4/5 (TRPC4/TRPC5) 拮抗剂，在细胞中，对 hTRPC5 和 hTRPC4 的 IC50 值分别为 9.3 nM 和 46 nM。

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| 生物活性 | HC-070 is an antagonist of TRPC4/TRPC5, with IC 50 s of 9.3 nM and 46 nM for hTRPC5 and hTRPC4 in cells, respectively. |
| IC50 & Target[1][2] | IC50: 9.3 nM (hTRPC5, cell assay), 46 nM (hTRPC4, cell assay) |
| 体外研究(In Vitro) | HC-070 is an antagonist of TRPC4/TRPC5, with IC50s of 9.3 nM and 46 nM for hTRPC5 and hTRPC4, respectively. HC-070 weakly inhibits TRPC3 (IC50, 1 μM), and is at least 400-fold selective for human TRPC4 and TRPC5-containing channels versus the other channels examined. HC-070 inhibits lanthanum-activated hTRPC5-, mTRPC5-, rTRPC5-mediated currents with IC50s of 0.52 nM, 0.55 nM, and 0.32 nM in whole-cell manual patch clamp. Furthermore, HC-070 blocks M2R-activated human TRPC1/TRPC4 channels with an IC50 of 1.3 nM and La- and M1R-activated human TRPC1/5 channels with IC50s of 1.4 nM and 4.4 nM. HC-070 inhibits human TRPC5 currents activated via muscarinic type 1 (M1R) with an IC50 of 2.0 nM. HC-070 also suppresses hTRPC4 currents via M2R with an IC50 of 0.49 nM. HC-070 (20 nM) reduces CCK-4 evoked neurona |

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| 体内研究(In Vivo) | HC-070 (1 mg/kg, p.o.) affects mice with increased evoked anxiety (CCK-4), but shows no effects in the absence of CCK-4. HC-070 (0.3, 1 or 3 mg/kg, p.o.) decreases anxiety in a standard EPM (more light/high anxiety). HC-070 (1 mg/kg) reduces the increased capacity for fear memory in mice subjected to chronic social stress on days 1-15. In addition, HC-070 (1, 3, 10 mg/kg, p.o.) causes reduction in marble burying behavior. HC-070 (0.3, 1, 3, 10 mg/kg, p.o.) also reduces time of immobility in a tail suspension test but does not impact locomotor activity in mice. has not independently confirmed the accuracy of these methods. They are for reference only. |
| 包装储存 | Powder -20°C 3 years； 4°C 2 years |
| 溶解度数据 | In Vitro: DMSO : ≥ 62.5 mg/mL (131.49 mM)配制储备液 |