For Research Use Only

Pridopidine

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Catalog Number: CM06439

产品信息

Catalog Number:
CM06439

CAS号:
346688-38-8

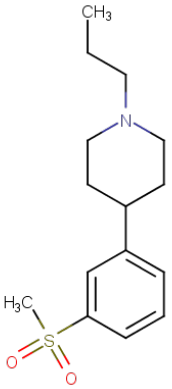
分子式:
$C_{15}H_{23}NO_2S$

主要靶点:
Dopamine Receptor

主要通路:
神经科学|G 蛋白偶联受体

分子量:
281.41

溶解度:
DMSO:45 mg/mL (159.91 mM)



靶点活性

σ 1 receptor:70-80 nM (Ki)

体内活性

Pridopidine的作用通过S1R介导，导致YAC128 MSNs中ER Ca2+释放、ER Ca2+水平和spine SOC入口的正常化。这是pridopidine作用机制的一个新发现，凸显S1R作为HD治疗的潜在靶点。长期使用pridopidine治疗可能通过上调调节钙的纹状体蛋白，包括calbindin和homer1a，进一步为HD中pridopidine的长期有益效果贡献。

动物实验

Sprague Dawley rats (n = 6) were treated daily by oral gavage with pridopidine (60 mg/kg) over 10 days. Six control Sprague Dawley rats were vehicle-treated. On the 10th day, 90 min following the last drug administration, brains were removed and RNA was isolated from the striatum of each rat and was analyzed using Affymetrix Rat 230_2 arrays. The gene expression data from 12 striatum samples was RMA normalized with affy package v1.42.3 in R v3.1.2. Probesets were annotated . The limma package v3.18.13 in R v3.1.3 was used to test if relevant calcium-related genes were differentially expressed between the two groups of biological replicates and multiple hypothesis testing was corrected for using the Bonferroni correction. Limma employs an empirical Bayes method to moderate standard error . When a gene had multiple probesets, the probeset with the highest absolute value of fold change was reported[1].

储存

Powder: -20°C for 3 years | In solvent: -80°C for 1 year | Shipping with blue ice.