For Research Use Only

Pridopidine

www.ptgcn.com

Catalog Number: CM06439

产品信息

Catalog Number:
CM06439

CAS号:
346688-38-8

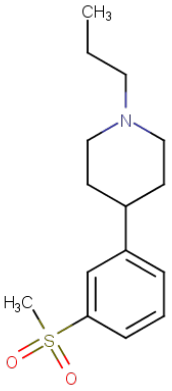
分子式:
$C_{15}H_{23}NO_2S$

主要靶点:
Dopamine Receptor

主要通路:
G蛋白偶联受体|神经科学

分子量:
281.41

溶解度:
DMSO:50 mg/mL (177.68 mM)



靶点活性

sigma 1 receptor:70-80 nM (Ki)

体内活性

The actions of pridopidine were mediated by S1R and led to normalization of ER Ca2+ release, ER Ca2+ levels and spine SOC entry in YAC128 MSNs. This is a new potential mechanism of action for pridopidine, highlighting S1R as a potential target for HD therapy. Upregulation of striatal proteins that regulate calcium, including calbindin and homer1a, upon chronic therapy with pridopidine, may further contribute to long-term beneficial effects of pridopidine in HD[1].

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].

描述

Pridopidine, a dopamine (DA) stabilizer, acts as a low affinity dopamine D2 receptor (D2R) antagonist, improves motor performance and shows neuroprotective effects in Huntington disease R6/2 mouse model.

储存

Powder: -20°C for 3 years | In solvent: -80°C for 2 years

For technical support and original validation data for this product please contact
T: 027-87531629 E: Proteintech-CN@ptglab.com W: ptgcn.com