Product Data Sheet

Product Name: Prochlorperazine D8
Cat. No.: GC36972

Chemical Properties

Cas. No.	1215641-01-2		
SMILES	ClC(C=C1)=CC2=C1SC3=CC=CC=C3N2CCCN4C([2H])([2H])C([2H])([2H])N(C)C([2H])([2H])C4([2H])[2H]		
Formula	$C_{20}H_{16}D_8ClN_3S$	M.Wt	381.99
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	Prochlorperazine D8		

Background

Prochlorperazine-d_8 is intended for use as an internal standard for the quantification of prochlorperazine by GC- or LC-MS. Prochlorperazine is a dopamine D_2 receptor antagonist with K_i values of 4.7 and 2.9 nM for rat recombinant D_2 receptors in CHO cells and rat striatal membranes, respectively.[1,2] It also binds to rat recombinant D_3 receptors expressed in CHO cells (K_i = 35 nM) and to the serotonin (5-HT) receptor subtype 5-HT_3 in N1E-115 mouse neuroblastoma cell membranes (K_i = 1,200 nM).[1,3] Prochlorperazine (2 mg/kg) increases the latency to paw licking in a hot plate test, indicating analgesia, an effect that is blocked by antisense oligonucleotides against the M_1 muscarinic receptor.[4] It also inhibits emesis induced by apomorphine in dogs (ED_{50} = 0.34 mg/kg).[5] Formulations containing prochlorperazine have been used in the treatment of psychotic disorders and as antiemetics.

1.Sokoloff, P., Giros, B., Martres, M.P., et al.Molecular cloning and characterization of a novel dopamine receptor (D3) as a target for neurolepticsNature137(6289)146-

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