

Product Data Sheet

Product Name: WIN 64338 hydrochloride

Cat. No.: GC17933

Chemical Properties

Cas. No. 163727-74-0

Chemical Name (S,E)-(N,N'-dicyclohexylcarbamimidoyl)(3-(naphthalen-2-yl)-1-oxo-1-((4-(tributylphosphonio)methyl)phenyl)amino)propan-2-yl)amide dihydrochloride

SMILES CCCC[P+](CCCC)(CC1=CC=C(NC([C@]([N-])/C(NC2CCCCC2)=N\C3CCCCC3)([H])CC4=CC5=CC=CC=C5C=C4)=O)C=C1)CCCC.Cl.Cl

Formula C₄₅H₆₈ClN₄OP.HCl M.Wt 783.95

Solubility <58.8mg/ml in DMSO 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

WIN 64338 hydrochloride is a potent and competitive antagonist of bradykinin B2 receptor [1].

Bradykinin B2 receptor is a G-protein coupled receptor for bradykinin. Bradykinin is an inflammatory nonapeptide and plays a critical role in edema, vasodilation, pain fiber stimulation and smooth muscle spasm.

WIN 64338 hydrochloride is a potent and competitive bradykinin B2 receptor antagonist. In human IMR-90 cells, WIN 64338 inhibited bradykinin binding to the bradykinin B2 receptor with Ki value of 64 nM and inhibited Ca²⁺ efflux stimulated by bradykinin with pA₂ value of 7.1 in a competitive way. WIN 64338 inhibited guinea pig ileum contractility induced by bradykinin with pA₂ value of 8.2 and also inhibited acetylcholine-induced contractility [1]. In iris sphincter isolated from rabbit, WIN 64338 (1-10 μM) inhibited

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

contractile responses evoked by bradykinin with pKB value of 6.6 [2]. In guinea-pig tracheal smooth muscle cells, WIN 64338 inhibited inositol phosphate formation induced by bradykinin [3].

In guinea-pigs, WIN 64338 (30 nM) significantly inhibited the increases in plasma extravasation induced by bradykinin via the release of tachykinins from the trigeminal nerve [2].

References:

- [1]. Sawutz DG, Salvino JM, Dolle RE, et al. The nonpeptide WIN 64338 is a bradykinin B2 receptor antagonist. Proc Natl Acad Sci U S A, 1994, 91(11): 4693-4697.
- [2]. Hall JM, Figini M, Butt SK, et al. Inhibition of bradykinin-evoked trigeminal nerve stimulation by the non-peptide bradykinin B2 receptor antagonist WIN 64338 in vivo and in vitro. Br J Pharmacol, 1995, 116(8): 3164-3168.
- [3]. Scherrer D, Schmidlin F, Lach E, et al. Effect of WIN 64338, a B2 bradykinin receptor antagonist on guinea-pig tracheal smooth muscle cells in culture. Fundam Clin Pharmacol, 1998, 12(2): 188-193.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA