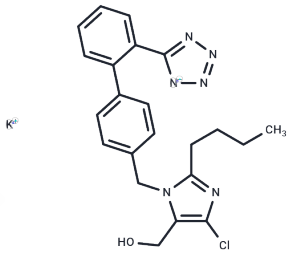
Data Sheet (Cat.No.T0215)

TargetMol

Losartan potassium

Chemical Properties



CAS No. :	124750-99-8
Formula:	C22H22ClKN6O
Molecular Weight:	461.01
Appearance:	no data available
Storage:	store under nitrogen Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Losartan potassium (DuP-753 potassium), an Angiotensin II Receptor Blocker, selectively and competitively inhibits the binding of angiotensin II to the angiotensin I (AT1) receptor.
Targets(IC50)	RAAS
In vitro	Losartan competes with the binding of angiotensin II to AT1 receptors, with an IC50 of 20 nM[1]. At 40 μM, losartan affects ISC and prevents the effect of ANGII on ISC[2]. It significantly reduces Ang II-mediated cell proliferation in endometrial cancer cells, and in combination with anti-miR-155, it exhibits a significantly greater antiproliferative effect compared to each drug alone[3].
Cell Research	An MTT assay is used to measure cell proliferation and viability. For the assay, 5000 cells in 200?μL media per well are seeded in a 96 well plate. After overnight incubation to allow for cell attachment, the medium is removed by suction. MTT at 1?mg/mL concentration in serum-free medium is added and then incubated for 4?h at 37°C. After removal of MTT solution, 100?μL of DMSO is added to dissolve formazan crystals. Absorbance at 570?nm and at 600?nm as a reference is then measured using a microplate reader. The difference in absorbance is thus relative to the extent of cell survival.

Solubility Information

Solubility	H2O: 46.1 mg/mL (100 mM),Sonication is recommended. DMSO: 55 mg/mL (119.3 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1692 mL	10.8458 mL	21.6915 mL
5 mM	0.4338 mL	2.1692 mL	4.3383 mL
10 mM	0.2169 mL	1.0846 mL	2.1692 mL
50 mM	0.0434 mL	0.2169 mL	0.4338 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Burnier, M. Angiotensin II type 1 receptor blockers. Circulation, 2001. 103(6): p. 904-12.
Ashry, O., et al. Evidence for expression and function of angiotensin II receptor type 1 in pulmonary epithelial cells. Respir Physiol Neurobiol, 2014.
Choi, C.H., et al. Angiotensin II type I receptor and miR-155 in endometrial cancers: synergistic antiproliferative effects of anti-miR-155 and losartan on endometrial cancer cells. Gynecol Oncol, 2012. 126(1): p. 124-31.
Strawn WB, et al. Circulation, 2000, 101(13), 1586-1593.
Habashi JP, et al. Science, 2006, 312(5770), 117-121.