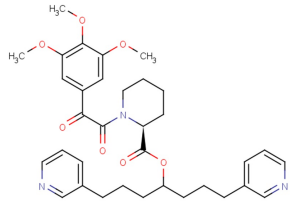
Data Sheet (Cat.No.T14616)

TargetMol
A DRUG SCREENING EXPERT

Biricodar

Chemical Properties



CAS No.:	159997-94-1
Formula:	C34H41N3O7
Molecular Weight:	603.71
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Biricodar is a P-glycoprotein and MRP-1 modulator.
Targets(IC_{50})	Others: None
In vitro	Biricodar shows activity against both P-glycoprotein (Pgp) and MRP-1. It also has activity in increasing drug uptake and retention and reversing drug resistance mediated by wild-type BCRP (BCRPR482). Biricodar also increases the uptake, retention and cytotoxicity in HL60/Adr (MRP-1) and 8226/MR20 cells (BCRP(R482)). And it has little effect in MCF7 AdVP3000 cells (BCRP(R482T))[1]. Biricodar effectively inhibits photoaffinity labeling of P-glycoprotein by [3H]azidopine or [125I]iodoaryl azido-prazosin with EC50 values of 0.75 and 0.55 μM[3]. In 8226/Dox6 cells (Pgp), biricodar increases mitoxantrone and daunorubicin uptake by 55 and 100%, respectively, increases their retention by 100 and 60%, respectively, and increases their cytotoxicity 3.1- and 6.9-fold, respectively. VX-710 is a non-macrocyclic pipecolinate derivative which binds the FK506 receptor protein and it has been shown to restore sensitivity in a range of multidrug-resistant cells, including myeloma, melanoma, carcinoma and leukaemia[2].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.656 mL	8.282 mL	16.564 mL
5 mM	0.331 mL	1.656 mL	3.313 mL
10 mM	0.166 mL	0.828 mL	1.656 mL
50 mM	0.033 mL	0.166 mL	0.331 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Minderman H, et al. VX-710 (biricodar) increases drug retention and enhances chemosensitivity in resistant cells overexpressing P-glycoprotein, multidrug resistance protein, and breast cancer resistance protein. Clin Cancer Res. 2004 Mar 1;10(5):1826-34.
2. Yanagisawa T, et al. BIRICODAR (VX-710; Incel): an effective chemosensitizer in neuroblastoma. Br J Cancer. 1999 Jun;80(8):1190-6.
3. Germann UA, et al. Cellular and biochemical characterization of VX-710 as a chemosensitizer: reversal of P-glycoprotein-mediated multidrug resistance in vitro. Anticancer Drugs. 1997 Feb;8(2):125-40.

Tel:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481