

## AB21 HCl

## Chemical Properties

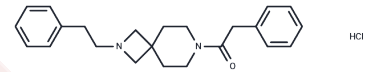
CAS No. :

Formula: C<sub>23</sub>H<sub>29</sub>ClN<sub>2</sub>O

Molecular Weight: 384.2

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	AB21 HCl is a selective antagonist of the $\sigma_1$ receptor, with $K_{is}$ of 13 nM for $\sigma_1$ receptor and 102 nM for $\sigma_2$ receptor. AB21 HCl is known for its ability to reduce mechanical hypersensitivity.
Targets(IC <sub>50</sub> )	Sigma receptor
In vitro	AB21 HCl measured $K_i$ values of 12 nM and 14 nM in the S1R radioligand binding assay with and without Phenythoin, respectively.[1]
In vivo	AB21 HCl (20 mg/kg; s.c.; administered 30 minutes before injection of Capsaicin reversed mechanical hypersensitivity in a Phenythoin-induced pain model and showed greater efficacy than BD1063 dihydrochloride higher potency, the dose administered was half that of BD-1063 (40 mg/kg).[1]

## Solubility Information

Solubility	DMSO: 6.25 mg/mL (16.27 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6028 mL	13.0141 mL	26.0281 mL
5 mM	0.5206 mL	2.6028 mL	5.2056 mL
10 mM	0.2603 mL	1.3014 mL	2.6028 mL
50 mM	0.0521 mL	0.2603 mL	0.5206 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Dichiara M, et al. Synthesis, Computational Insights, and Evaluation of Novel Sigma Receptors Ligands. ACS Chem Neurosci. 2023;14(10):1845-1858.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481