

AFD-21

## Chemical Properties

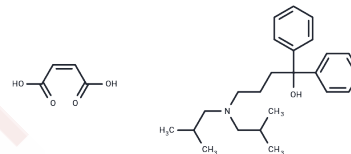
CAS No. : 99465-44-8

Formula: C<sub>28</sub>H<sub>39</sub>NO<sub>5</sub>

Molecular Weight: 469.61

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	AFD-21 is a class I antiarrhythmic drug. It binds to sodium channels in their inactivated state and exerts use- and voltage-dependent inhibition of sodium channels with unbinding rates comparable to those of class I antiarrhythmic drugs with moderate kinetics.
Targets(IC50)	Others,Sodium Channel

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1294 mL	10.6471 mL	21.2943 mL
5 mM	0.4259 mL	2.1294 mL	4.2589 mL
10 mM	0.2129 mL	1.0647 mL	2.1294 mL
50 mM	0.0426 mL	0.2129 mL	0.4259 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

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- Komori S, Sawanobori T, Tamura K, Kane KA, Parratt JR. Effects of NS-2, a new class 1 antiarrhythmic agent, and AFD-19, its active metabolite, on ventricular arrhythmias induced by coronary artery occlusion and reperfusion in anesthetized rats: comparison with disopyramide and mexiletine. *Jpn J Pharmacol*. 1994 Jul;65(3):193-200. PubMed PMID: 7799519.
- Kodama I, Kamiya K, Kawamura T, Suzuki R, Toyama J. Electrophysiological effects of AFD-21 and AFD-19, new antiarrhythmic compounds on papillary muscles and single ventricular myocytes isolated from guinea-pig hearts. *Br J Pharmacol*. 1990 Dec;101(4):803-8. PubMed PMID: 2085705; PubMed Central PMCID: PMC1917845.
- Kojima M, Ban T. Effects of AFD-21, a new class I antiarrhythmic agent, and AFD-19, its active metabolite, on the maximal rate of rise of action potentials in guinea pig papillary muscles: dependence on time, voltage, and action potential duration. *J Cardiovasc Pharmacol*. 1989 Mar;13(3):483-93. PubMed PMID: 2471896.

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