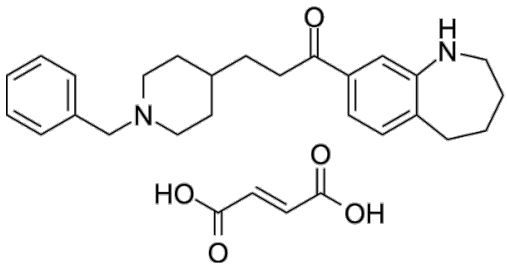
Product Data Sheet

Product Name: Zanapezil
Cat. No.: GC75875

Chemical Properties

Cas. No.	142852-51-5		
Formula	$C_{29}H_{36}N_2O_5$	M.Wt	492.61
Solubility	DMSO: 100 mg/mL (203.00 mM; Need ultrasonic)	Storage	4°C, sealed storage, away from moisture
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

Zanapezil (TAK-147) is a potent, reversible and selective acetylcholine esterase (AChE) inhibitor.

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Zanapezil shows a potent and reversible inhibition of AChE activity in homogenates of the rat cerebral cortex (IC_{50}=51.2 nM). Zanapezil shows a moderate inhibition of muscarinic M1 and M2 receptor binding with K_i values of 234 and 340 nM, respectively. Zanapezil can be used for the research of early stages of Alzheimer's disease (AD)[1][2].

References:

[1]. K Hirai, et al. Neurochemical effects of 3-[1-(phenylmethyl)-4-piperidinyl]-1-(2,3,4,5-tetrahydro-1H-1-b enzazepin-8-yl)-1-propanone fumarate (TAK-147), a novel acetylcholinesterase inhibitor, in rats. J Pharmacol Exp Ther. 1997 Mar;280(3):1261-9.
[2]. Izzettin Hatip-Al-Khatib,et al. Comparison of the effect of TAK-147 (zanapezil) and E-2020 (donepezil) on extracellular acetylcholine level and blood flow in the ventral hippocampus of freely moving rats. Brain Res. 2004 Jun 25;1012(1-2):169-76.

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