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产品名称: **Epiberberine (chloride)**

产品别名: 表小檗碱氯化物

生物活性:					
Description		Epiberberine chloride is an alkaloid isolated from <i>Coptis chinensis</i> , acts as a potent AChE and BChE inhibitor, and a non-competitive BACE1 inhibitor, with IC50s of 1.07, 6.03 and 8.55 μ M, respectively. Epiberberine chloride has antioxidant activity, with peroxynitrite ONOO ⁻ scavenging effect (IC50, 16.83 μ M), and may protect against Alzheimer disease[1]. Epiberberine chloride inhibits the early stage of differentiation of 3T3-L1 preadipocytes, downregulates the Raf/MEK1/2/ERK1/2 and AMPK α /Akt pathways[2]. Epiberberine has the potential effect in the research of diabetic disease[3].			
In Vitro		Epiberberine (0, 12.5, 25, or 50 μ M) dose-dependently inhibits cellular triglyceride accumulation in 3T3-L1 adipocytes, with an IC50 of 52.8 μ M[2]. Epiberberine (12.5-50 μ M) suppresses the Raf/MEK1/ERK1/2 and AMPK α /Akt pathways in the early stage of 3T3-L1 adipocyte differentiation[2]. Epiberberine (0.2, 1, 5 μ g/mL) inhibits glucose uptake in HepG2 cells in a concentration-dependent manner[3].			
In Vivo		Epiberberine (225 mg/kg, p.o. daily for 40 days) reduces body weight, food consumption, water intake, and urinary output of KK-Ay mice[3].			
Solvent&Solubility		In Vitro: DMSO : 7.4 mg/mL (19.90 mM; Need ultrasonic)			
		Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg
			1 mM	2.6895 mL	13.4477 mL
			5 mM	0.5379 mL	2.6895 mL
			10 mM	0.2690 mL	1.3448 mL
		*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液。一旦配成溶液, 请分装保存, 避免反复冻融造成的产品失效。 储备液的保存方式和期限: -80 $^{\circ}$ C, 6 months; -20 $^{\circ}$ C, 1 month。-80 $^{\circ}$ C 储存时, 请在 6 个月内使用, -20 $^{\circ}$ C 储存时, 请在 1 个月内使用。			
References		[1]. Jung HA, et al. Anti-Alzheimer and antioxidant activities of <i>Coptidis Rhizoma</i> alkaloids. <i>Biol Pharm Bull.</i> 2009 Aug;32(8):1433-8. [2]. Choi JS, et al. Anti-adipogenic effect of epiberberine is mediated by regulation of the Raf/MEK1/2/ERK1/2 and AMPK α /Akt pathways. <i>Arch Pharm Res.</i> 2015 Dec;38(12):2153-62. [3]. Ma H, et al. Antihyperglycemia and Antihyperlipidemia Effect of Protoberberine Alkaloids From <i>Rhizoma Coptidis</i> in HepG2 Cell and Diabetic KK-Ay Mice. <i>Drug Dev Res.</i> 2016 Jun;77(4):163-70.			