GW4869 2HCl

货号：G0418

储存条件：粉末-20°C 可保存 3 年；液体-80°C 可保存 12 月。

产品描述

The activation of neutral magnesium-dependent sphingomyelinase (N-SMase) has been observed after the stimulation of p75 neurotropin receptor. GW4869 dihydrochloride is a noncompetitive inhibitor of N-SMase in vitro with an IC50 value of 1μM. In MCF7 breast cancer cells, GW4869 at 10μM partially but significantly suppressed TNF-induced sphingomyelin hydrolysis, while 20μM of this inhibitor completely inhibited the loss of sphingomyelin. The addition of GW4869 at 10 and 20μM also completely inhibited the initial accumulation of ceramide. The presence of GW4869 at 10 and 20μM successfully reduced TNF-induced cell death and significantly protected cells from nuclear condensation after TNF treatment in a dose-dependent manner. The same doses of GW4869 also reduced the number of cells that were positive for chromatin condensation. Preincubation of MCF7 cells with 10μM GW4869 partially blocked TNF-caused cleavage of PARP, whereas 20μM of this compound completely prevented the cleavage. Moreover, 10 and 20μM of GW4869 significantly protected the release of cytochrome c from mitochondria into the cytosol in a dose-dependent manner. In 5XFAD mice, intraperitoneal injection of GW4869 (2 – 2.5μg/g body weight) every 48h for six weeks decreased the levels of brain and serum exosomes, brain ceramide, and Aβ1-42 plaque load as compared to the DMSO-treated group.

产品信息

CAS 号	6823-69-4	
分子式	C30H30Cl2N6O2	
分子量	577.50	
溶解度	DMSO	1.0 mg/mL (1.7 mM) warming
	Water	insoluble