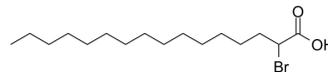


2-Bromohexadecanoic acid

Cat. No.:	HY-111770		
CAS No.:	18263-25-7		
Molecular Formula:	C ₁₆ H ₃₁ BrO ₂		
Molecular Weight:	335.32		
Target:	Pyroptosis		
Pathway:	Apoptosis; Immunology/Inflammation		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (298.22 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM		2.9822 mL	14.9111 mL	29.8223 mL
		5 mM		0.5964 mL	2.9822 mL	5.9645 mL
		10 mM		0.2982 mL	1.4911 mL	2.9822 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.46 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.46 mM); Clear solution 					

BIOLOGICAL ACTIVITY

Description	2-Bromohexadecanoic acid (2-Bromopalmitic acid) can be converted to 2-bromopalmitate (2-BP). 2-BP is a palmitoylation inhibitor targeting DHHHC (Asp-His-His-Cys) protein palmitoyltransferase. 2-BP inhibits palmitoylation of GSDME-C during pyroptosis and inhibits BAK/BAX-Caspase 3-GSDME pathway-mediated pyroptosis ^[1] .
In Vitro	Palmitoylation promotes the release of GSDME-C from GSDME-N after cleavage, and 2-BP inhibits the palmitoylation process, while inhibiting the modification of GSDME-C increases the interaction between GSDME-C and GSDME-N. 2-BP inhibits TNFα+CHX-induced apoptosis but not total cell death ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Hu L, et al. Chemotherapy-induced pyroptosis is mediated by BAK/BAX-caspase-3-GSDME pathway and inhibited by 2-bromopalmitate. Cell Death Dis. 2020 Apr 24;11(4):281.

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

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