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Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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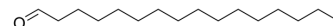
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Hexadecanal

Cat. No.:	HY-W004305
CAS No.:	629-80-1
Molecular Formula:	C ₁₆ H ₃₂ O
Molecular Weight:	240.42
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	-20°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 2.5 mg/mL (10.40 mM; ultrasonic and warming and heat to 60°C)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		4.1594 mL	20.7969 mL	41.5939 mL
	5 mM		0.8319 mL	4.1594 mL	8.3188 mL
	10 mM		0.4159 mL	2.0797 mL	4.1594 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Hexadecanal (Palmitaldehyde) , a volatile long-chain aliphatic aldehyde, is emitted from human feces, skin, and breath. The receptor for hexadecanal(OR37B) is highly conserved across mammals. Hexadecanal may exert its effects by modulating functional connectivity between the brain substrates of social appraisal and the brain substrates of aggressive execution. Also, Hexadecanal is confirmed to be highly deterrent to the ant *Lasius niger*. Hexadecanal is promising for the research of startle responses and aggression^{[1][2][3]}

IC₅₀ & Target

Endogenous Metabolite^[1]

In Vivo

Hexadecanal (0.48 ng/μL, 4 h) administrated with 2-heptadecanone (1.4 ng/μL, 4 h) increases visiting (“touching”) and approaching (“close”) the control honey-water in ants^[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Mishor E, et al. Sniffing the human body volatile hexadecanal blocks aggression in men but triggers aggression in women[J]. Sci Adv. 2021 Nov 19;7(47):eabg1530.

[2]. Jaffuel G, et al. Potent Ant Deterrents Emitted from Nematode-Infected Insect Cadavers[J]. J Chem Ecol. 2022 Jan;48(1):71-78.

[3]. Gilbertson JR, et al. Isolation and analysis of free fatty aldehydes from rat, dog, and bovine heart muscle. J Lipid Res. 1967 Jan;8(1):38-45.

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

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