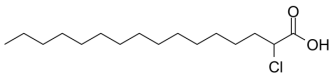
2-Chlorohexadecanoic acid

Cat. No.:	HY-131688
CAS No.:	19117-92-1
Molecular Formula:	$C_{16}H_{31}ClO_2$
Molecular Weight:	290.87
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	2-Chlorohexadecanoic acid, an inflammatory lipid mediator, interferes with protein palmitoylation,induces ER-stress markers, reduced the ER ATP content, and activates transcription and secretion of IL-6 as well as IL-8.2-Chlorohexadecanoic acid disrupts the mitochondrial membrane potential and induces procaspase-3 and PARP cleavage.2-Chlorohexadecanoic acid can across blood-brain barrier (BBB) and compromises ER- and mitochondrial functions in the human brain endothelial cell line hCMEC/D3[1].
In Vitro	2-Chlorohexadecanoic acid (2-ClHA; 10 μM; 4, 6 h) results phosphorylation of eIF2α starting 4 h post treatment, while total eIF2α levels remained unchanged incubation of hCMEC/D3 cells. 2-Chlorohexadecanoic acid increases expression of ATF4, a target gene of eIF2α[1]. 2-Chlorohexadecanoic acid (25 μM, 30 min) induces a decrease in the FRET ratio signal of ERAT by 40%, indicating significantly diminished [ATP]ER in cells that were treated with 2-Chlorohexadecanoic acid[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Eva Bernhart, et al. 2-Chlorohexadecanoic acid induces ER stress and mitochondrial dysfunction in brain microvascular endothelial cells. Redox Biol. 2018 May;15:441-451.

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