

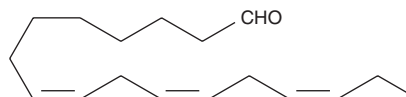
PRODUCT INFORMATION



8(Z),11(Z),14(Z)-Heptadecatrienal

Item No. 10005154

CAS Registry No.: 56797-44-5
Formal Name: 8Z,11Z,14Z-heptadecatrienal
Synonyms: 17:3-al, all-cis-8,11,14-Heptadecatrienal
MF: C₁₇H₂₈O
FW: 248.4
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

8(Z),11(Z),14(Z)-Heptadecatrienal is a polyunsaturated fatty aldehyde. It is formed from α -linolenic acid (Item Nos. 90210 | 21910) via a 2(R)-hydroperoxy-9(Z),12(Z),15(Z)-octadecatrienoic acid intermediate.¹ It is also a degradation product of 2(R)-hydroperoxy linolenic acid. 8(Z),11(Z),14(Z)-Heptadecatrienal (100 μ M) is active against the plant pathogenic bacteria *P. syringae*.² It protects *Arabidopsis* plants against infection by the bacteria *Pst* DC3000 when injected into the leaves at a concentration of 150 μ M prior to bacterial inoculation.³

References

1. Hamberg, M., Sanz, A., and Castresana, C. α -Oxidation of fatty acids in higher plants. Identification of a pathogen-inducible oxygenase (PIOX) as an α -dioxygenase and biosynthesis of 2-hydroperoxylinolenic acid. *J. Biol. Chem.* **274**(35), 24503-24513 (1999).
2. Prost, I., Dhondt, S., Rothe, G., et al. Evaluation of the antimicrobial activities of plant oxylipins supports their involvement in defense against pathogens. *Plant Physiol.* **139**(4), 1902-1913 (2005).
3. Vicente, J., Cascón, T., Vicedo, B., et al. Role of 9-lipoxygenase and α -dioxygenase oxylipin pathways as modulators of local and systemic defense. *Mol. Plant* **5**(4), 914-928 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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