

# PRODUCT INFORMATION



## *cis*-10-Nonadecenoic Acid

Item No. 19749

**CAS Registry No.:** 73033-09-7  
**Formal Name:** 10Z-nonadecenoic acid  
**Synonyms:** FA 19:1, Nonadeca-10(Z)-enoic Acid  
**MF:** C<sub>19</sub>H<sub>36</sub>O<sub>2</sub>  
**FW:** 296.5  
**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.

### Laboratory Procedures

*cis*-10-Nonadecenoic acid is supplied as a solution in ethanol. To change the solvent, simply evaporate the *cis*-10-nonadecenoic acid under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of *cis*-10-nonadecenoic acid in these solvents is approximately 30 mg/ml.

*cis*-10-Nonadecenoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of *cis*-10-nonadecenoic acid should be diluted with the aqueous buffer of choice. *cis*-10-Nonadecenoic acid has a solubility of approximately 0.25 mg/ml in a 1:7 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

*cis*-10-Nonadecenoic acid is a C19:1 monounsaturated fatty acid. It has been examined for potential antitumor activity and was reported to inhibit HL-60 cell proliferation with an IC<sub>50</sub> value of 295 μM and to prevent LPS-induced tumor necrosis factor production from mouse macrophages.<sup>1</sup> Furthermore, long-chain fatty acids, such as *cis*-10-nonadecenoic acid, have been shown to inhibit p53 activity.<sup>2</sup>

### References

1. Fukuzawa, M., Yamaguchi, R., Hide, I., *et al.* Possible involvement of long chain fatty acids in the spores of *Ganoderma lucidum* (Reishi Houshi) to its anti-tumor activity. *Biol. Pharm. Bull.* **31(10)**, 1933-1937 (2008).
2. Iijima, H., Kasai, N., Chiku, H., *et al.* The inhibitory action of long-chain fatty acids on the DNA binding activity of p53. *Lipids* **41(6)**, 521-527 (2006).

#### 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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