

# PRODUCT INFORMATION



## NBD-Stearic Acid

Item No. 10011299

**Formal Name:** 18-((7-nitrobenzo[c][1,2,5]oxadiazol-4-yl)amino)octadecanoic acid

**Synonyms:** NBD-C18:0, NBD-FA 18:0, NBD-Octadecanoic Acid

**MF:** C<sub>24</sub>H<sub>38</sub>N<sub>4</sub>O<sub>5</sub>

**FW:** 462.6

**Purity:** ≥98%

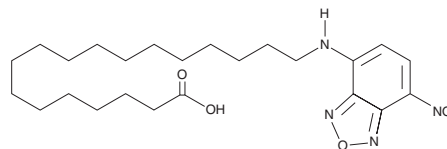
**UV/Vis.:** λ<sub>max</sub>: 227, 333, 465 nm

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥4 years

**Special Conditions:** Light sensitive



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

### Laboratory Procedures

NBD-Stearic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the NBD-stearic acid in the solvent of choice, which should be purged with an inert gas. NBD-Stearic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of NBD-stearic acid in these solvents is approximately 20, 10, and 30 mg/ml, respectively.

### Description

NBD-Stearic acid is a derivative of the long-chain saturated fatty acid stearic acid (Item No. 10011298) that contains the fluorophore nitrobenzoxadiazole (NBD) at C-18. NBD-conjugated long-chain saturated fatty acids have been used as probes to study fatty acid uptake and fatty acid binding proteins (FABPs).<sup>1,2</sup>

### References

1. Atshaves, B.P., Foxworth, W.B., Frolov, A., *et al.* Cellular differentiation and I-FABP protein expression modulate fatty acid uptake and diffusion. *Am. J. Physiol.* **274**(3), C633-C644 (1998).
2. Myers-Payne, S.C., Hubbell, T., Pu, L., *et al.* Isolation and characterization of two fatty acid binding proteins from mouse brain. *J. Neurochem.* **66**(4), 1648-1656 (1996).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM