

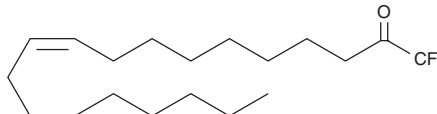
# PRODUCT INFORMATION



## Oleyl Trifluoromethyl Ketone

Item No. 62640

**CAS Registry No.:** 177987-23-4  
**Formal Name:** 1,1,1-trifluoro-10Z-nonadecen-2-one  
**Synonyms:** Heptadecyl Trifluoromethyl Ketone, OTK  
**MF:** C<sub>19</sub>H<sub>33</sub>F<sub>3</sub>O  
**FW:** 334.5  
**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

Oleyl trifluoromethyl ketone is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of oleyl trifluoromethyl ketone in these solvents is approximately 25 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of oleyl trifluoromethyl ketone is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of oleyl trifluoromethyl ketone in PBS, pH 7.2, is approximately 50 µg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Oleyl trifluoromethyl ketone is an analog of oleic acid (Item No. 90260) in which the COOH group is replaced by trifluoromethyl ketone. It is a potent inhibitor of FAAH, in both human and rat. In transfected COS-7 cells, 10 µM oleyl trifluoromethyl ketone inhibits 95.7% of human FAAH activity and 94.8% of rat FAAH activity.<sup>1,2</sup>

### References

1. Cravatt, B.F., Giang, D.K., Mayfield, S.P., *et al.* Molecular characterization of an enzyme that degrades neuromodulatory fatty-acid amides. *Nature* **384**, 83-87 (1996).
2. Giang, D.K. and Cravatt, B.F. Molecular characterization of human and mouse fatty acid amide hydrolases. *Proc. Natl. Acad. Sci. USA* **94**, 2238-2242 (1997).

#### 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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