# PRODUCT INFORMATION

## FKGK 11

*Item No. 13179*

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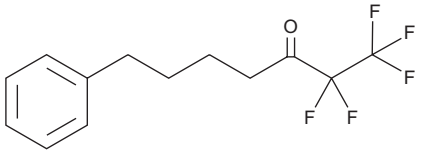
|---|---|
| **CAS Registry No.:** | 1071000-98-0 |
| **Formal Name:** | 1,1,1,2,2-pentafluoro-7-phenyl-3-heptanone |
| **MF:** | $C_{13}H_{13}F_5O$ |
| **FW:** | 280.2 |
| **Purity:** | ≥98% |
| **Supplied as:** | A solution in ethanol |
| **Storage:** | -20°C |
| **Stability:** | ≥2 years |




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

### Laboratory Procedures

FKGK 11 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 FKGK 11 in these solvents is approximately 20 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 FKGK 11 is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of FKGK 11 in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Phospholipase $A_2$ ($PLA_2$) catalyzes the hydrolysis of fatty acids at the *sn*-2 position of glycerophospholipids, yielding a free fatty acid and a lysophospholipid as products. There are three broad classes of $PLA_2$, secretory ($sPLA_2$), calcium-dependent cytosolic ($cPLA_2$), and calcium-independent cytosolic ($iPLA_2$), that have different functions. FKGK 11 is a selective inhibitor of $iPLA_2$ that demonstrates an $X_I(50)$ value of 0.0073, where $X_I(50)$ equals the mole fraction of FKGK 11 in the total substrate interface required to inhibit $iPLA_2$ by 50%.[1] In comparison, mole fractions as high as 0.091 do not inhibit $cPLA_2$ activity and cause only slight inhibition of $sPLA_2$.[1]

### Reference

1. Baskakis, C., Magrioti, V., Cotton, N., *et al*. Synthesis of polyfluoro ketones for selective inhibition of human phospholipase $A_2$ enzymes. *J. Med. Chem.* **51(24)**, 8027-8037 (2008).



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