

# PRODUCT INFORMATION

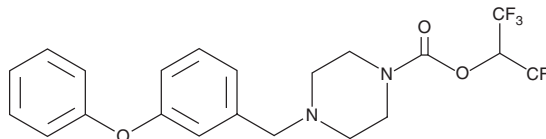


**JW 642**

Item No. 11789

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**CAS Registry No.:** 1416133-89-5  
**Formal Name:** 1,1,1,3,3,3-hexafluoropropan-2-yl  
4-(3-phenoxybenzyl)piperazine-  
1-carboxylate  
**MF:** C<sub>21</sub>H<sub>20</sub>F<sub>6</sub>N<sub>2</sub>O<sub>3</sub>  
**FW:** 462.4  
**Purity:** ≥98%  
**Supplied as:** A solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥2 years



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

## Laboratory Procedures

JW 642 is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate 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 JW 642 in these solvents is approximately 13, 5, and 11 mg/ml, respectively.

JW 642 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of JW 642 should be diluted with the aqueous buffer of choice. JW 642 has a solubility of 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

JW 642 is an inhibitor of monoacylglycerol lipase (MAGL; IC<sub>50</sub>s = 3.7, 7.6, and 14 nM for the human, mouse, and rat enzymes, respectively).<sup>1</sup> It is selective for MAGL over fatty acid amide hydrolase (FAAH; IC<sub>50</sub>s = 20.6, 31, and 14 μM for the human, mouse, and rat enzymes, respectively), as well as α/β-hydrolase domain-containing protein 6 (ABHD6; IC<sub>50</sub>s = 107 and 50 nM for the mouse and rat enzymes, respectively).

## Reference

1. Chang, J.W., Niphakis, M.J., Lum, K.M., *et al.* Highly selective inhibitors of monoacylglycerol lipase bearing a reactive group that is bioisosteric with endocannabinoid substrates. *Chem. Biol.* **19(5)**, 579-588 (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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