

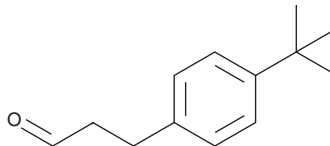
# PRODUCT INFORMATION



## Bourgeonal

Item No. 29965

CAS Registry No.: 18127-01-0  
Formal Name: 4-(1,1-dimethylethyl)-benzenepropanal  
MF:  $C_{13}H_{18}O$   
FW: 190.3  
Purity:  $\geq 95\%$   
UV/Vis.:  $\lambda_{max}$ : 214 nm  
Supplied as: An oil  
Storage:  $-20^{\circ}C$   
Stability:  $\geq 4$  years



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

### Laboratory Procedures

Bourgeonal is supplied as an oil. A stock solution may be made by dissolving the bourgeonal in the solvent of choice, which should be purged with an inert gas. Bourgeonal is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of bourgeonal in these solvents is approximately 30, 10, and 15 mg/ml, respectively.

Bourgeonal is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, bourgeonal should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Bourgeonal has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Bourgeonal is an agonist of human testicular olfactory receptor hOR17-4.<sup>1</sup> It increases cytosolic calcium levels in human spermatozoa when used at a concentration of 5  $\mu M$ . Bourgeonal acts as a chemoattractant and increases swimming speed in sperm chemotaxis assays in a concentration-dependent manner.

### Reference

1. Spehr, M., Gisselmann, G., Poplawski, A., *et al.* Identification of a testicular odorant receptor mediating human sperm chemotaxis. *Science* **299**(5615), 2054-2058 (2003).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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