

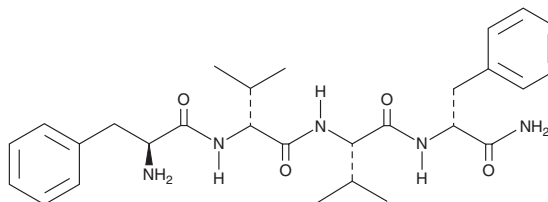
# PRODUCT INFORMATION



## Bilaid A1

Item No. 31243

**CAS Registry No.:** 2393866-02-7  
**Formal Name:** L-phenylalanyl-D-valyl-L-valyl-D-phenylalaninamide  
**Synonyms:** H-FVVF-NH<sub>2</sub>, H-L-Phe-D-Val-L-Val-D-Phe-NH<sub>2</sub>  
**MF:** C<sub>28</sub>H<sub>39</sub>N<sub>5</sub>O<sub>4</sub>  
**FW:** 509.6  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Bilaid A1 is supplied as a solid. A stock solution may be made by dissolving the bilaid A1 in the solvent of choice, which should be purged with an inert gas. Bilaid A1 is sparingly soluble (1-10 mg/ml) in DMSO and methanol and slightly soluble (0.1-1 mg/ml) in acetonitrile.

### Description

Bilaid A1 is a tetrapeptide agonist of the  $\mu$ -opioid receptor ( $K_i = 750$  nM in HEK293 cell membranes expressing the human receptor) and a derivative of bilaid A (Item No. 31242).<sup>1</sup> It inhibits forskolin-induced cAMP accumulation by 47% in HEK293 cells expressing the human  $\mu$ -opioid receptor when used at a concentration of 10  $\mu$ M.

### Reference

1. Dekan, Z., Sianati, S., Yousuf, A., *et al.* A tetrapeptide class of biased analgesics from an Australian fungus targets the  $\mu$ -opioid receptor. *Proc. Natl. Acad. Sci. USA* **116(44)**, 22353-22358 (2019).

#### 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

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