

# PRODUCT INFORMATION



## IDR 1018 (acetate)

Item No. 44012

**Formal Name:** L-valyl-L-arginyl-L-leucyl-L-isoleucyl-L-valyl-L-alanyl-L-valyl-L-arginyl-L-isoleucyl-L-tryptophyl-L-arginyl-L-argininamide, acetate

**Peptide Sequence:** VRLIVAVRIWRR-NH<sub>2</sub>

**MF:** C<sub>71</sub>H<sub>126</sub>N<sub>26</sub>O<sub>12</sub> • XC<sub>2</sub>H<sub>4</sub>O<sub>2</sub>

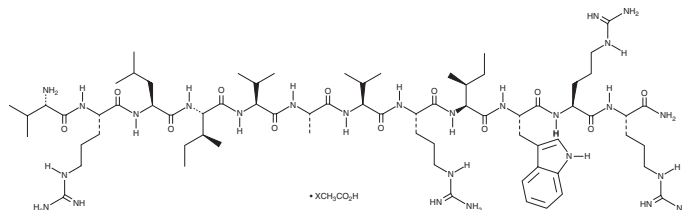
**FW:** 1,536.0

**Purity:** ≥98%

**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

IDR 1018 (acetate) is supplied as a solid. A stock solution may be made by dissolving the IDR 1018 (acetate) in the solvent of choice, which should be purged with an inert gas. IDR 1018 (acetate) is slightly soluble (0.1-1 mg/ml) in acetonitrile.

IDR 1018 (acetate) is slightly soluble (0.1-1 mg/ml) in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

IDR 1018 is an antibacterial peptide.<sup>1</sup> It is active against *P. aeruginosa* and *S. aureus* (MICs = 19 and 5 µg/ml, respectively). IDR 1018 (20 µg/ml) decreases TNF-α secretion induced by LPS in isolated human peripheral blood mononuclear cells (PBMCs). It reduces biofilm formation by *P. aeruginosa*, *A. baumannii*, *S. enterica*, and methicillin-resistant *S. aureus* (MRSA) when used in combination with ceftazidime (Item No. 14828).<sup>2</sup>

### References

1. Wieczorek, M., Jenssen, H., Kindrachuk, J., *et al.* Structural studies of a peptide with immune modulating and direct antimicrobial activity. *Chem. Biol.* **17**(9), 970-980 (2010).
2. Reffuveille, F., de la Fuente-Núñez, C., Mansour, S., *et al.* A broad-spectrum antibiofilm peptide enhances antibiotic action against bacterial biofilms. *Antimicrob. Agents Chemother.* **58**(9), 5363-5371 (2014).

#### 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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