

IDR-1018

Cat. No.:	HY-P3361
CAS No.:	1453221-07-2
Molecular Formula:	C ₇₁ H ₁₂₆ N ₂₆ O ₁₂
Molecular Weight:	1535.93
Sequence:	Val-Arg-Leu-Ile-Val-Ala-Val-Arg-Ile-Trp-Arg-Arg-NH ₂
Sequence Shortening:	VRLIVAVRIWRR-NH ₂
Target:	Parasite; Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	IDR-1018 is an innate defense regulator conjugate, with MICs of 16 µg/mL for MRSA USA300 LAC, MRSA SAP 0017 and S. epidermidis ATCC14990. IDR-1018 can be used to synthesis V-IDR1018 (vancomycin-innate defense regulator conjugate) ^{[1][2]} .
In Vitro	IDR-1018 modulates the expression of neutrophil adhesion and activation markers ^[3] . IDR-1018 is the most potent inducer of chemokines to date and demonstrates anti-infective and anti-inflammatory activity in mouse models, including efficacy in treating Plasmodium berghei ANKA cerebral malaria when administered in conjunction with standard first-line antimalarials ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Hashem Etayash, Multifunctional Antibiotic–Host Defense Peptide Conjugate Kills Bacteria, Eradicates Biofilms, and Modulates the Innate Immune Response. J. Med. Chem. 2021, 64, 22, 16854-16863.
- [2]. Hashem Etayash, et al. Correction to “Multifunctional Antibiotic–Host Defense Peptide Conjugate Kills Bacteria, Eradicates Biofilms, and Modulates the Innate Immune Response”. J. Med. Chem. 2022, 65, 3, 2710-2711.
- [3]. François Niyonsaba, et al. The innate defense regulator peptides IDR-HH2, IDR-1002, and IDR-1018 modulate human neutrophil functions. J Leukoc Biol. 2013 Jul;94(1):159-70.

Caution: Product has not been fully validated for medical applications. For research use only.

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