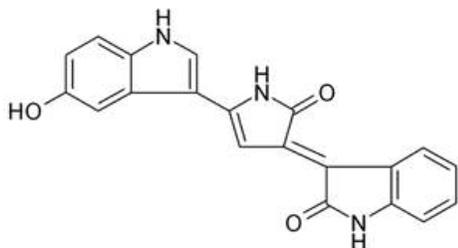


## Product Information

### Violacein from *Janthinobacterium lividum*

Catalog Number **V9389**  
Storage Temperature 2–8 °C

CAS RN 548-54-9



#### Product Description

Molecular Weight: 343.33  
Molecular formula: C<sub>20</sub>H<sub>13</sub>N<sub>3</sub>O<sub>3</sub>

Violacein, a violet pigment, is an indole derivative produced by different bacterial strains such as *Chromobacterium violaceum*, *Janthinobacterium lividum*, *Chromobacterium lividum*, and *Pseudoalteromonas luteoviolacea*. This pigment possesses antitumoral, antibacterial, antiulcerogenic, antileishmanial, and antiviral activities.<sup>1-5</sup> The antiprotosoal activity of violacein is also detected for its derivative deoxyviolacein.<sup>5</sup> Violacein and its β-cyclodextrin complexes are found to trigger apoptosis and differentiation in HL60 leukemic cells.<sup>2</sup> Violacein cytotoxicity in HL60 cells is preceded by activation of caspase 8, transcription of NF-κB target genes, and p38-MAPK activation, which resembles TNF-α signal transduction in these cells.<sup>6</sup> These properties make violacein a member of a novel class of cytotoxic drugs mediating apoptosis of HL60 cells by way of specific activation of TNF receptor 1.<sup>6</sup>

#### Purity (HPLC):

violacein and deoxyviolacein >98%  
violacein ≥85%

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Preparation Instructions

Violacein is insoluble in water. It is soluble in alcohols such as methanol and ethanol, and soluble in acetone.

#### Storage/Stability

Store the product at 2–8 °C. Under these conditions, the product is stable for two years.

#### References

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3. Durán, N., et al., *Can. J. Physiol. Pharmacol.*, **81**, 387-396 (2003).
4. Leon, L.L., et al., *J. Antimicrob. Chemother.*, **48**, 449-450 (2001).
5. Matz, C., et al., *PLoS ONE*, **3**, 1-7 (2008).
6. Ferreira, C.V., et al., *Blood*, **104**, 1459-1464 (2004).

KAA,DWF,MAM 10/08-1

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