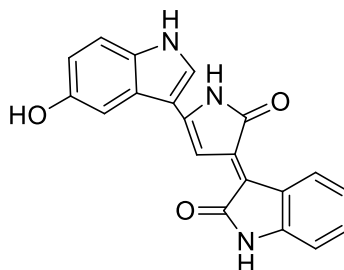


Violacein

Code No.: **BIA-V1327**

Pack sizes: **1 mg, 5 mg**



Synonyms : Anorosin

Specifications

CAS #	: 548-54-9
Molecular Formula	: C ₂₀ H ₁₃ N ₃ O ₃
Molecular Weight	: 343.3
Source	: <i>Chromobacterium violaceum</i>
Appearance	: Violet blue solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Violacein is an intense violet pigment formed by the condensation of two tryptophan units, found in a number of bacteria, notably *Chromobacterium violaceum*. The regulation of pigment biosynthesis is the chromogenic basis for the use of *C. violaceum* CV26 for the detection of quorum sensing mediators. Violacein exhibits broad spectrum activity against bacteria, protozoans (including malaria), viruses and mammalian cell lines. Violacein cell toxicity resembles TNF- α signal transduction.

References

1. The chemistry of bacteria. Part II. Some degradation products of violacein. Beer R.J.S. et al., J. Chem Soc. 1949, 885.
2. Quorum sensing and *Chromobacterium violaceum*: exploitation of violacein production and inhibition for the detection of N-acyl homoserine lactones. McClean K.H. et al., Microbiol. 1997, 143, 3703.
3. Molecular mechanism of violacein-mediated human leukemia cell death. Ferreira C.V. et al., Blood 2004, 104, 1459.