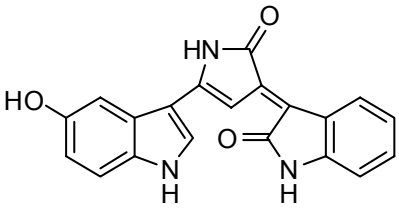
bioaustralis
fine chemicals

PRODUCT DATA SHEET

Violacein

Code: **BIA-V1327**

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



Synonyms : **Anorosin**

Specifications

CAS #	:	**548-54-9**
Molecular Formula	:	**$C_{20}H_{13}N_3O_3$**
Molecular Weight	:	**343.3**
Source	:	***Chromobacterium violaceum***
Appearance	:	**Violet blue solid**
Purity	:	**>99%**
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 elicits a broad spectrum of action 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.

Building C, 28-54 Percival Road, Smithfield NSW 2164, AUSTRALIA
Tel: 61 2 9757 4515 Fax: 61 2 9757 2586 Web: www.bioaustralis.com Email: info@bioaustralis.com