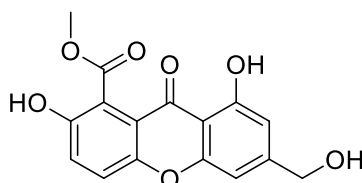


Sydowinin B

Code No.: **BIA-S1976**

Pack sizes: **0.25 mg, 1 mg**



Synonyms : MS 347b

Specifications

CAS #	: 58450-00-3
Molecular Formula	: C₁₆H₁₂O₇
Molecular Weight	: 316.26
Source	: <i>Aspergillus sydowii</i>
Appearance	: Yellow solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Sydowinin B is a xanthone mycotoxin isolated from *Aspergillus sydowii* with immunosuppressive and weak cytotoxic activity. Interestingly, sydowinin B was isolated from a vast algal bloom which formed off the eastern coast of Australia following dust storms in 2009 with the potential to adversely affect photophysiological performance of the coral reef dinoflagellate endosymbiont Symbiodinium. Sydowinin B inhibits concanavalin A-induced (T-cell) and lipopolysaccharide-induced (B-cell) proliferation of mouse splenic lymphocytes with IC₅₀ OF 19 and 21 µg/mL, respectively.

References

1. Isolation of new metabolites from *Aspergillus sydowii* and structure of sydowic acid. Hamasaki T. et al. Agric Biol Chem. 1975, 39, 2337.
2. *Aspergillus sydowii* marine fungal bloom in Australian coastal waters, its metabolites and potential impact on symbiodinium dinoflagellates. Aiko H. et al. Mar Drugs 2016, 14, 59.
3. Combined cytotoxicity of the phycotoxin okadaic acid and mycotoxins on intestinal and neuroblastoma human cell models. Aiko H. et al. Toxins 2018, 10, 526.
4. Polyketides with immunosuppressive activities from mangrove endophytic fungus *Penicillium* sp. ZJ-SY2. Liu H. et al. Mar. Drugs 2016, 14, 217.