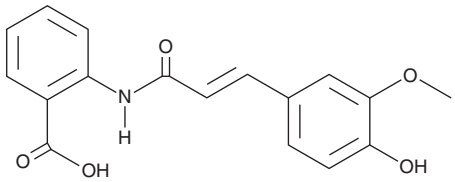
PRODUCT INFORMATION

Avenanthramide E

Item No. 46547

CAS Registry No.:	93755-77-2
Formal Name:	2-[[(2E)-3-(4-hydroxy-3-methoxyphenyl)-1-oxo-2-propen-1-yl]amino]-benzoic acid
Synonyms:	Avenanthramide 1f, AVN-E
MF:	$C_{17}H_{15}NO_5$
FW:	313.3
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/Oat



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Avenanthramide E is supplied as a solid. A stock solution may be made by dissolving the avenanthramide E in the solvent of choice, which should be purged with an inert gas. Avenanthramide E is soluble (≥10 mg/ml) in DMSO.

Description

Avenanthramide E is a phenolic alkaloid that has been found in *A. sativa* and has diverse biological activities.[1-5] It is also an active metabolite of the antiallergic agent tranilast (Item Nos. 13044 | 46383).[6] Avenanthramide E reduces lipid peroxidation in a cell-free assay at 40 µM, scavenges DPPH (Item No. 14805) radicals in a cell-free assay, reduces ferric to ferrous iron in a ferric reducing antioxidant power (FRAP) assay, and inhibits hydrogen peroxide-induced DNA damage in HT-29 cells (EC_{50} = 1.1 µM).[2,3] It inhibits the replication of monkeypox virus in infected Vero cells (EC_{50} = 8.1 µM).[4] Avenanthramide E (100 µM) also inhibits TGF-β-induced collagen production by 50% in cultured renal mesangial cells.[5]

References

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3. Lee-Manion, A.M., Price, R.K., Strain, J.J., *et al.* In vitro antioxidant activity and antigenotoxic effects of avenanthramides and related compounds. *J. Agric. Food Chem.* **57(22)**, 10619-10624 (2009).
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5. Zammit, S.C., Cox, A.J., Gow, R.M., *et al.* Evaluation and optimization of antifibrotic activity of cinnamoyl anthranilates. *Bioorg. Med. Chem. Lett.* **19(24)**, 7003-7006 (2009).
6. Slobodzian, D.K., Hsieh, J.Y., and Bayne, W.F. Simultaneous determination of tranilast and metabolites in plasma and urine using high-performance liquid chromatography. *J. Chromatogr.* **345(2)**, 345-354 (1985).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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