

## PRODUCT DATA SHEET

Code No.: BIA-V1677

Pack sizes: 5 mg, 25 mg



Synonyms

: Vulpic acid; Methylpulvinic acid

Specifications
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Vulpinic acid

CAS #	: <b>521-52-8</b>
Molecular Formula	: C <sub>19</sub> H <sub>14</sub> O <sub>5</sub>
Molecular Weight	: <b>322.3</b>
Source	: Letharia sp.
Appearance	: White to off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSC

## **Application Notes**

Vulpinic acid is the methyl ester of pulvinic acid. It is present in many lichen species and was originally isolated from Letharia vulpine (wolf lichen) in the 19th century with its structure elucidated in the early part of the 20th century. Vulpinic acid exhibits antibacterial, antitumor, anti-inflammatory and plant growth regulation activity, along with a diverse range of other activities.

## References

- 1. Uber die Konstitution und Konfiguration der Pulvinsauren und Vulpinsauren. Karrer P. et al., Helv. Chima. Acta, 1926, 9, 446.
- 2. Antibacterial and antiproliferative activities of vulpinic acids in vitro. Nadir M.T. et al., Farmaco 1992, 47, 643.
- Growth retarding activity of lichen substances against the polyphagous herbivorous insect Spodoptera littoralis. Giez I. et al., Biochem. System. Ecol. 1994, 22, 113.
- 4. In vitro activities of the lichen secondary metabolites vulpinic acid, (+)-usnic acid, and (-)-usnic acid against aerobic and anaerobic microorganisms. Lauterwein M. et al., Antimicrob. Agent Chemother. 1995, 39, 254.
- 5. Lichen acids as uncouplers of oxidative phosphorylation of mouse-liver mitochondria. Abo-Khatwa A.N. et al., Natural Toxins 1996, 4, 96.

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