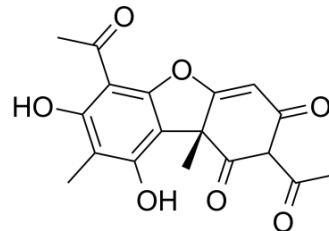


## (+)-Usnic acid

Cat. No.:	HY-N0656A
CAS No.:	7562-61-0
Molecular Formula:	C <sub>18</sub> H <sub>16</sub> O <sub>7</sub>
Molecular Weight:	344.32
Target:	mTOR
Pathway:	PI3K/Akt/mTOR
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### BIOLOGICAL ACTIVITY

<b>Description</b>	(+)-Usnic acid is isolated from lichens, binds at the ATP-binding pocket of <b>mTOR</b> , and inhibits <b>mTORC1/2</b> activity. (+)-Usnic acid inhibits the phosphorylation of mTOR downstream effectors: Akt (Ser473), 4EBP1, S6K, induces <b>autophagy</b> , with anti-cancer activity <sup>[1]</sup> .
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<b>IC<sub>50</sub> &amp; Target</b>	mTORC1	mTORC2
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### REFERENCES

[1]. Ebrahim HY, et al. Usnic Acid Benzylidene Analogues as Potent Mechanistic Target of Rapamycin Inhibitors for the Control of Breast Malignancies. *J Nat Prod.* 2017 Apr 28;80(4):932-952.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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