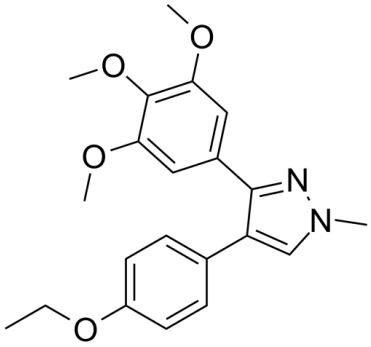
Data Sheet

Product Name:	Tubulin inhibitor 1
Cat. No.:	CS-0047691
CAS No.:	2237054-53-2
Molecular Formula:	C21H24N2O4
Molecular Weight:	368.43
Target:	Apoptosis; Microtubule/Tubulin
Pathway:	Apoptosis; Cell Cycle/DNA Damage; Cytoskeleton
Solubility:	DMSO : ≥ 125 mg/mL (339.28 mM)



BIOLOGICAL ACTIVITY:

Tubulin inhibitor 1 is a **tubulin** inhibitor, inhibits tubulin polymerization. Tubulin inhibitor 1 shows potent anti-tumor activity, casues cellular mitotic arrest in the G2/M phase, and induces cellular **apoptosis**[1]. IC50 & Target: Tubulin[1] **In Vitro:** Tubulin inhibitor 1 (Compound 7a3) is a tubulin inhibitor, inhibits tubulin polymerization[1].

Tubulin inhibitor 1 has potent anti-proliferative activity against SK-OV-3, MDA-MB-231, HeLa, A549, CT26 and MCF-7 cells, with IC_{50}s of 16.7 ± 3.0, 31.4 ± 0.7, 32.8 ± 2.9, 67.0 ± 0.8, 58.0 ± 2.4 and 35.4 ± 5.6 nM, respectively[1].

Tubulin inhibitor 1 (40, 80, and 160 nM, 48 hours) markedly causes cellular mitotic arrest in the G2/M phase, induces apoptosis in SK-OV-3 cells[1]. **In Vivo:** Tubulin inhibitor 1 (50 mg/kg, i.p., every two days three times for 20-25 days) is well tolerated, significantly reduces tumour growth in Balb/c nude mice bearing SK-OV-3 cells[1].

References:

[1]. Lai Q, et al. Design, synthesis and biological evaluation of a novel tubulin inhibitor 7a3. Eur J Med Chem. 2018 Aug 5;156:162-179.

CAIndexNames:

4-(4-Ethoxyphenyl)-1-methyl-3-(3,4,5-trimethoxyphenyl)-1H-pyrazole

SMILES:

CCOC1=CC=C(C2=CN(C)N=C2C3=CC(OC)=C(OC)C(OC)=C3)C=C1

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

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