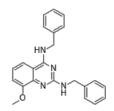


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## **Data Sheet**

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	VPS4 inhibitor 4-107
Cat. No.	:	PC-24320
CAS No.	:	1346527-45-4
Molecular Formula	:	C <sub>23</sub> H <sub>22</sub> N <sub>4</sub> O
Molecular Weight	:	370.46
Target	:	p97/VCP
Solubility	:	10 mM in DMSO



CAS: 1346527-45-4

## **Biological Activity**

VPS4 inhibitor 4-107 is a DBeQ derivative and vacuolar protein sorting 4 (**VPS4**) AAA-ATPase inhibitor (IC50=3.7 uM, VPS4B), inhibits VPS4 ATPase activity, induces CASP8-mediated apoptosis.

VPS4 inhibitor 4-107 is modestly selective for VPS4B in vitro over VCP (IC50=8.6 uM).

VPS4 inhibitor 4-107 4-107 (1  $\mu$ M) does not induce ER stress or the accumulation of polyubiquitinated proteins, unlike CB-5083.

VPS4 inhibitor 4-107 exhibits improved cellular potency and selectivity for VPS4 compared with DBeQ.

4-107 induces ESCRT accumulation on LC3-positive autophagosomal membranes.

4-107 exhibits lysosomotropic properties and disrupts endolysosomal membrane integrity.

4-107 induces CASP8-mediated VPS4-sensitive cell death

4-107 (5 mg/kg/day, i.p.) suppresses tumor growth in syngeneic mouse model of neuroblastoma, without causing severe toxicity in mice.

## References

Fundora KA, et al. *J Pharmacol Exp Ther.* 2025 Feb 28;392(4):103524.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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