

Data Sheet

Product Information

Catalog Number	BP15256
Product Name	SH5-07
Description	SH5-07 is a hydroxamic acid-based Stat3 inhibitor (IC50: 3.9 $\mu M).$
Targets&IC50	STAT3:3.9 µM (cell free)
In vitro	SH5-07 is a hydroxamic acid analog of BP-1-102. SH5-07 dose-dependently inhibits Stat3 activity (IC50: $3.9\pm0.6~\mu M$ in in vitro assay). It preferentially inhibits Stat3:Stat3 DNA-binding activity, ahead of inhibiting Stat1:Stat3 activity, with minimal effects on Stat1:Stat1 activity. SH5-07 binds Stat3, disrupts Stat3 association with growth factor receptor, and thereby inhibits Stat3 phosphorylation. It induces antitumor cell effects against malignant cells harboring constitutively-active Stat3. SH5-07 inhibits the expression of known Stat3-regulated genes. Bcl-xL, Bcl-2, c-Myc, Survivin, Cyclin D1, and Mcl-1 expression is reduced in response to 24 h, 5 μ M SH5-07 treatment.
In vivo	Tail vein injection or oral gavage delivery of SH5-07 inhibits the growth of 90-150 mm^3 established subcutaneous mouse xenografts of human glioma (U251MG) and breast (MDA-MB-231) tumors that harbor aberrantly-active Stat3, associated with decreased Mcl-1, c-Myc, and Cyclin D1 expression. No significant changes in body weights, blood cell counts, or the gross anatomy of organs, or obvious signs of toxicity are observed.
CAS No.	1456632-41-9
Chemical Formula	C29H28F5N3O5S
Molecular Weight	625.61

Solubility	H2O: Insoluble DMSO: 50 mg/mL (79.92 mM), Need ultrasonic
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	OH NH OH NH FF ON NH ON

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v2 Revision on 12/28/2022