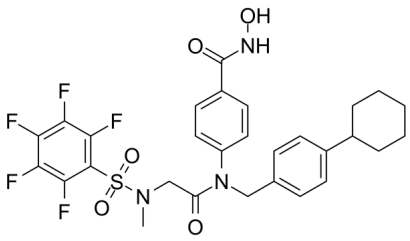
Purdue Bioscience

http://www.purduebio.com

Certificate of Analysis

Catalog Number	BP15256
Product Name	SH5-07

Physical and Chemical Properties

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	

Product Information

Description	SH5-07 is a hydroxamic acid-based Stat3 inhibitor (IC50: 3.9 μM).
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±0.6 μM 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 μM 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.

Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.

Purdue Bioscience Inc.

750 50th St, Brooklyn, NY 11220, USA

http://www.purduebio.com

1-877.618.7311

info@purduebio.com

v2 Revision on 12/28/2022