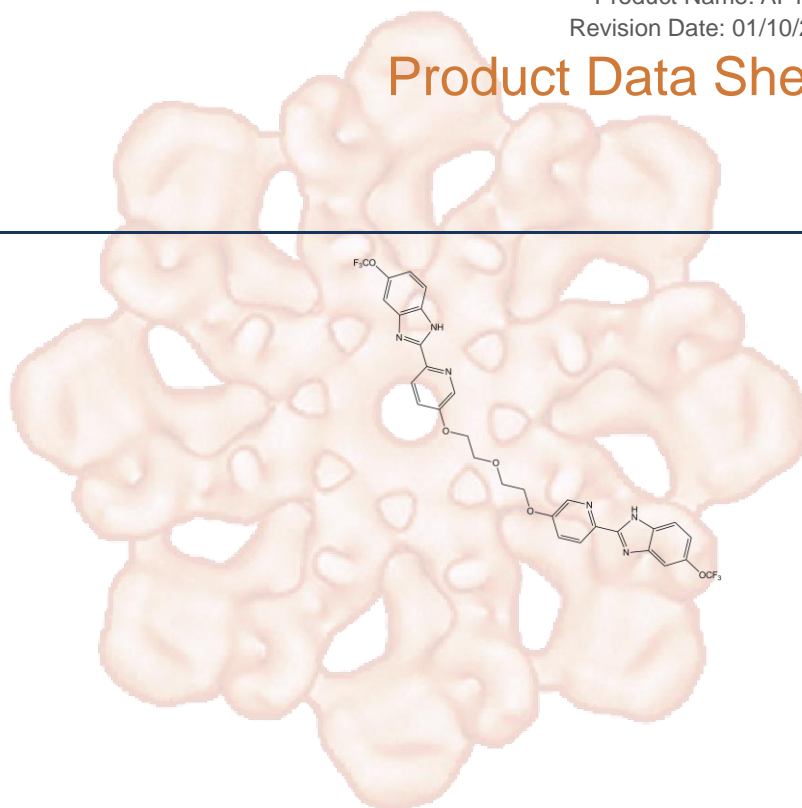


Product Data Sheet

AI-10-49

Cat. No.:	A8694
CAS No.:	1256094-72-0
Formula:	C30H22F6N6O5
M.Wt:	660.52
Synonyms:	
Target:	Cancer Biology
Pathway:	Leukemia
Storage:	Store at -20°C



Solvent & Solubility

≥ 16.53mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent Concentration	Mass	1mg	5mg	10mg
		1 mM	5 mM	10 mM	
	1 mM	1.5140 mL	7.5698 mL	15.1396 mL	
	5 mM	0.3028 mL	1.5140 mL	3.0279 mL	
	10 mM	0.1514 mL	0.7570 mL	1.5140 mL	

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Inhibitor of CBFβ –SMMHC and RUNX1 interaction

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	ME-1 (human leukemia cell lines)
Preparation method:	Limited solubility. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	6 h
Applications:	After 6 hours of treatment, AI-10-49 effectively dissociates RUNX1 from CBFb-SMMHC with 90% dissociation, by contrast, it has a mild effect on

CBFb-RUNX1 association. The ChIP assays indicates that AI-10-49 treatment on ME-1 cells for 6 hours increases RUNX1 occupancy 8-, 2.2-, and 8-fold at the RUNX3, CSF1R, and CEBPA promoters.

Animal experiment

Animal models: Transplanted mice with Cbfb+/MYH11:Ras+/G12D leukemic cells

Dosage form: 200 mg/kg; 10 days

Applications: Mice treated with AI-10-49 survives markedly longer (median latency = 61 days) and transient AI-10-49 treatment also reduces leukemia spreading in vivo.

Other notes: Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

In Vivo

Product Citations

See more customer validations on www.apexbt.com.

References

1. Illendula A, Pulikkan JA, Zong H et.al A small-molecule inhibitor of the aberrant transcription factor CBF β -SMMHC delays leukemia in mice. Science. 2015 Feb 13;347(6223):779-84.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APExBIO Technology

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