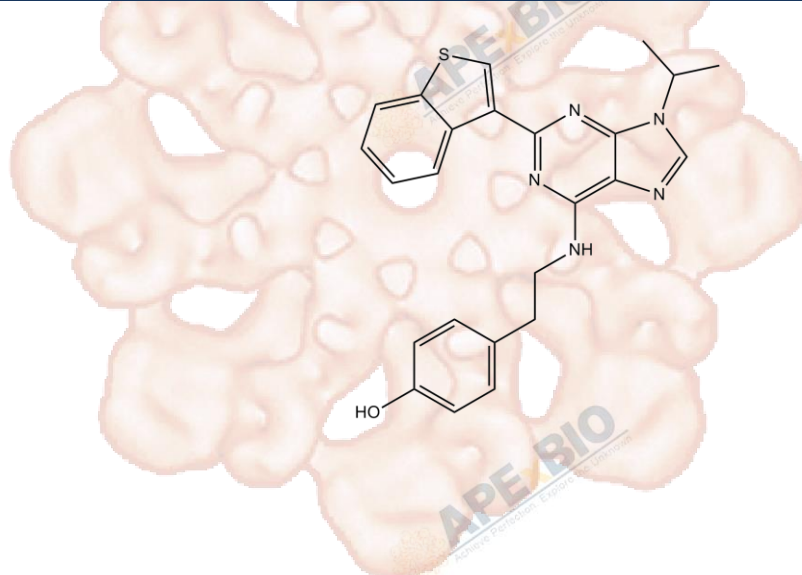


Product Data Sheet

StemRegenin 1 (SR1)

Cat. No.:	A8224
CAS No.:	1227633-49-9
Formula:	C ₂₄ H ₂₃ N ₅ O ₅
M.Wt:	429.54
Synonyms:	
Target:	Others
Pathway:	AhR
Storage:	Store at -20°C



Solvent & Solubility

≥21.5 mg/mL in DMSO; insoluble in H₂O; ≥3.41 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		2.3281 mL	11.6404 mL	23.2807 mL
	5 mM		0.4656 mL	2.3281 mL	4.6561 mL
	10 mM		0.2328 mL	1.1640 mL	2.3281 mL

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

Biological Activity

Shortsummary

AhR antagonist

IC₅₀ & Target

127 nM (AhR)

In Vitro

Cell Viability Assay

Cell Line: CD34+UCB cells

Preparation method: The solubility of this compound in DMSO is >10 mM. 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: 1 μM, 3 weeks

	Applications:	CD34+UCB cells were cultured for 3 weeks with 1µM SR1 or 0.01% DMSO (control). Total cell number was determined at day 7, 14, and 21 and the frequency of pDCs was evaluated at each time point by flow cytometry. During the 3-weeks culture period the total nucleated cells continuously expanded. Analysis of pDC differentiation in time revealed that the maximum frequency of pDCs was already reached at day 14. However, the absolute number of pDCs was highest on day 21.
In Vivo	Animal experiment	
	Applications:	
	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.

Product Citations

See more customer validations on www.apexbt.com.

References

[1] Thordardottir S, Hangalapura B N, Hutten T, et al. The Aryl Hydrocarbon Receptor Antagonist StemRegenin 1 Promotes Human Plasmacytoid and Myeloid Dendritic Cell Development from CD34+ Hematopoietic Progenitor Cells. *Stem cells and development*, 2013, 23(9): 955-967.

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 APEX BIO 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

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

