



Data Sheet

Research Use Only

Compound Name

StemRegenin 1

Catalog Number

SM98

Activity

StemRegenin 1 is an AhR inhibitor. StemRegenin 1 induces CD34+ cell expansion by binding and antagonizing AhR.

Purity

>98%

Formula

C₂₄H₂₃N₅OS

Solubility

DMSO

Alternative Names

SR1, 4-[2-[[2-benzo[b]thien-3-yl-9-(1-methylethyl)-9H-purin-6-yl]amino]ethyl]-phenol

Effect

StemRegenin 1 treatment accelerates the proliferation of CD34+ cells. Sequential coculture with BMP-4, PGE2, and StemRegenin 1 leads to robust *Macaca nemestrina* iPSC hematopoietic progenitor cell formation. Culture of mPB CD34+ cells with cytokines plus StemRegenin 1 increases the number of CD34+, CD133+ and CD90+ hematopoietic stem and progenitor cell populations compared to control cells. StemRegenin 1 promotes human plasmacytoid and myeloid dendritic cell development from CD34+ hematopoietic progenitor cells.

CAS

1227633-49-9

Molecular Weight

429.54

Stability

Stable at -20°C. Keep away from direct sunlight.

References

1. Gao, H., et al. 2012. J Biol Chem. 287(35): 29979-29987. PMID: 22791709
2. Gori, JL., et al. 2012. Blood. 120(13): e35-44. PMID: 22898598
3. Thordardottir, S., et al. 2014. Stem Cells Dev. 23(9): 955-967. PMID: 24325394