Small Molecules

RSC-133

Epigenetic modifier; Inhibits DNA methyltransferase (DNMT)

Catalog # 73392

10 mg

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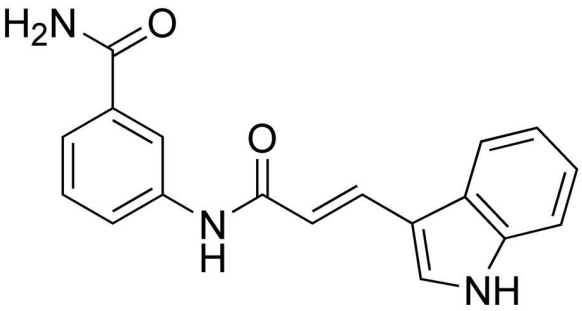
Product Description

Reprogramming stimulating compound (RSC)-133 is an indole derivative that specifically inhibits DNA methyltransferase DNMT1 (Lee et al.).

Molecular Name:	RSC-133
Alternative Names:	Not applicable
CAS Number:	1418131-46-0
Chemical Formula:	$C_{18}H_{15}N_3O_2$
Molecular Weight:	305.3 g/mol
Purity:	≥ 95%
Chemical Name:	3-[[(2E)-3-(1H-indol-3-yl)-1-oxo-2-propen-1-yl]amino]-benzamide
Structure:	

Properties

Physical Appearance:	A crystalline solid
Storage:	Product stable at -20°C as supplied. Protect from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Solubility:	· DMSO ≤ 65 mM · Absolute ethanol ≤ 15 mM For example, to prepare a 10 mM stock solution in DMSO, resuspend 10 mg in 3.28 mL of DMSO. Prepare stock solution fresh before use. Information regarding stability of small molecules in solution has rarely been reported, however, as a general guide we recommend storage in DMSO at -20°C. Aliquot into working volumes to avoid repeated freeze-thaw cycles. The effect of storage of stock solution on compound performance should be tested for each application. Compound has low solubility in aqueous media. For use as a cell culture supplement, stock solution should be diluted into culture medium immediately before use. Avoid final DMSO concentration above 0.1% due to potential cell toxicity.

Published Applications

MAINTENANCE AND SELF-RENEWAL
· Supports the maintenance of human pluripotent stem cells in unconditioned medium (Lee et al.).
REPROGRAMMING
· Increases kinetics and efficiency of reprogramming human foreskin fibroblasts to induced pluripotent stem cells, when used with reprogramming factors OCT4, SOX2, KLF4, and c-MYC (Lee et al.).

References

Lee J et al. (2012) A novel small molecule facilitates the reprogramming of human somatic cells into a pluripotent state and supports the maintenance of an undifferentiated state of human pluripotent stem cells. Angew Chem Int Ed Engl 51(50): 12509–13.

Related Small Molecules

For a complete list of small molecules available from STEMCELL Technologies, please visit our website at www.stemcell.com/smallmolecules or contact us at techsupport@stemcell.com.

This product is hazardous. Please refer to the Safety Data Sheet (SDS).