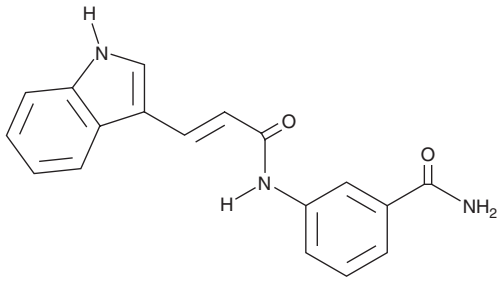
PRODUCT INFORMATION

RSC-133

Item No. 9001839

CAS Registry No.:	1418131-46-0
Formal Name:	3-[[(2E)-3-(1H-indol-3-yl)-1-oxo-2-propen-1-yl]amino]-benzamide
MF:	$C_{18}H_{15}N_3O_2$
FW:	305.3
Purity:	≥95%
UV/Vis.:	λ_{max}: 224, 277, 340, 351 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

RSC-133 is supplied as a crystalline solid. A stock solution may be made by dissolving the RSC-133 in the solvent of choice, which should be purged with an inert gas. RSC-133 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of RSC-133 in these solvents is approximately 5, 20, and 25 mg/ml, respectively.

RSC-133 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RSC-133 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. RSC-133 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

RSC-133 is an indole compound that promotes the reprogramming of human somatic cells to pluripotent stem cells.[1] Specifically, when used at 10 µM with four standard reprogramming factors, it increases the number of human foreskin fibroblasts that express the stem cell marker alkaline phosphatase.[1] RSC-133 induces pluripotency by both down-regulating inducers of cellular senescence and inhibiting DNA methyltransferase and histone deacetylase activities.[1]

Reference

1. Lee, J., Xia, Y., Son, M.Y., *et al.* 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.* **51(50)**, 12509-12513 (2012).

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