

Small Molecules

UM171

Pyrimido-indole derivative that enhances HSC self-renewal in vitro

Catalog # 72912
72914

250 µg of active compound
1 mg of active compound



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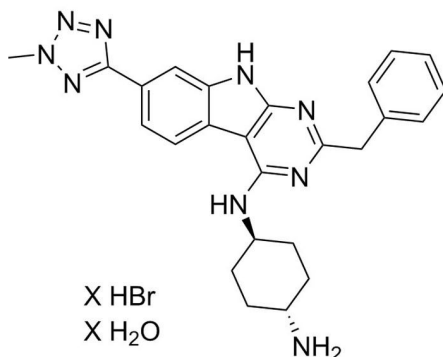
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Product Description

UM171 is a pyrimido-[4,5-b]-indole derivative which enhances the self-renewal of human hematopoietic stem cells (HSCs) in vitro (Fares et al.).

Molecular Name:	UM171
Alternative Names:	UM-171
CAS Number:	Not applicable
Chemical Formula:	C ₂₅ H ₂₇ N ₉ · X HBr [X H ₂ O]
Molecular Weight:	453.54 g/mol (free base)
Purity:	> 95%
Chemical Name:	(1r,4r)-N ¹ -(2-benzyl-7-(2-methyl-2H-tetrazol-5-yl)-9H-pyrimido[4,5-b]indol-4-yl)cyclohexane-1,4-diamine
Structure:	



Properties

Physical Appearance:	Yellow solid
Storage:	Product stable at room temperature (15 - 25°C) as supplied. Protect from prolonged exposure to light. Stable as supplied for 12 months from date of receipt.
Solubility:	· DMSO ≤ 20 mM For example, to prepare a 1 mM stock solution in DMSO, dissolve 1 mg in 2.20 mL of fresh DMSO or dissolve 250 µg in 551 µL of fresh 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

- Enhances human hematopoietic stem cell self-renewal in vitro (Fares et al.).

References

Fares I et al. (2014) Pyrimidoindole derivatives are agonists of human hematopoietic stem cell self-renewal. *Science* 345(6203): 1509–12.

Related Small Molecules

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

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

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