

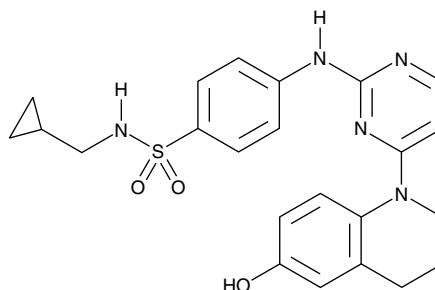
Product Information



Pyrintegrin

Item No. 16179

CAS Registry No.: 1228445-38-2
Formal Name: N-(cyclopropylmethyl)-4-[[4-(3,4-dihydro-6-hydroxy-1(2H)-quinolinyl)-2-pyrimidinyl]amino]-benzenesulfonamide
MF: C₂₃H₂₅N₅O₃S
FW: 451.5
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 290 nm



Laboratory Procedures

For long term storage, we suggest that pyrintegrin be stored as supplied at -20°C. It should be stable for at least two years.

Pyrintegrin is supplied as a crystalline solid. A stock solution may be made by dissolving the pyrintegrin in the solvent of choice. Pyrintegrin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of pyrintegrin in these solvents is approximately 1, 30, and 50 mg/ml.

Pyrintegrin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, pyrintegrin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Pyrintegrin has a solubility of approximately 0.1 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.

Human embryonic stem cells (hESC), unlike murine ESC, grow *in vitro* as large flattened two dimensional colonies.¹ Dispersing these colonies, using trypsin to dissociate single hESC, results in massive cell death.¹ Pyrintegrin is a 2,4-disubstituted pyrimidine that, at 2 μM, enhances the survival of hESC more than 30-fold after trypsin-mediated dissociation.¹ It increases integrin-dependent attachment of hESC to extracellular matrices, including Matrigel™ and laminin, without significantly impacting cell proliferation.¹ Pyrintegrin increases the binding of the activated β1 integrin-specific antibody HUTS-21 and enhances the phosphorylation of multiple growth factor receptors and their downstream kinases, PI3K and MAPK.¹

Reference

1. Xu, Y., Zhu, X., Hahm, H.S., *et al.* Revealing a core signaling regulatory mechanism for pluripotent stem cell survival and self-renewal by small molecules. *Proc. Natl. Acad. Sci. USA* **107(18)**, 8129-8134 (2010).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16179

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

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