

PRODUCT INFORMATION



Caylin-2

Item No. 10005002

CAS Registry No.: 1392830-09-9

Formal Name: 4-[4,5-bis(4-trifluoromethyl-phenyl)-2-(2-isopropoxy-4-methoxy-phenyl)-4,5-dihydro-imidazole-1-carboxyl]-piperazin-2-one

MF: $C_{32}H_{30}F_6N_4O_4$

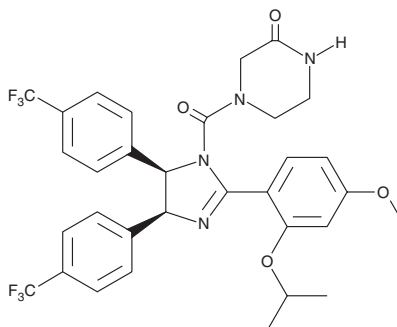
FW: 648.6

Purity: $\geq 98\%$

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

Caylin-2 is supplied as a crystalline solid. A stock solution may be made by dissolving the caylin-2 in an organic solvent purged with an inert gas. Caylin-2 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of caylin-2 in these solvents is at least 30 mg/ml.

Caylin-2 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, caylin-2 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Caylin-2 has a solubility of 0.025 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Nutlin-3 is an activator of p53 that functions by inhibiting the interaction of p53 with MDM2, a negative regulator of p53 activity.¹ Caylin-2 is a nutlin-3 analog in which trifluoromethyl groups have been substituted for chlorine on two of the phenyl rings. At high concentrations, caylin-2 inhibits the growth of HCT116 cells with an IC_{50} of approximately 8 μM , making it about 10-fold less potent than nutlin-3. Interestingly, at concentrations between 5-100 nM, caylin-2 promotes the growth of HCT116 cells approximately 40% compared to untreated cells.² The mechanism of the growth promoting properties of caylin-2 have not yet been elucidated.

References

1. Vassilev, L.T., Vu, B.T., Graves, B., *et al.* *In vivo* activation of the p53 pathway by small-molecule antagonists of MDM2. *Science* **303**, 844-848 (2004).
2. Meade, E.A., [Unpublished] (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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