

PRODUCT INFORMATION

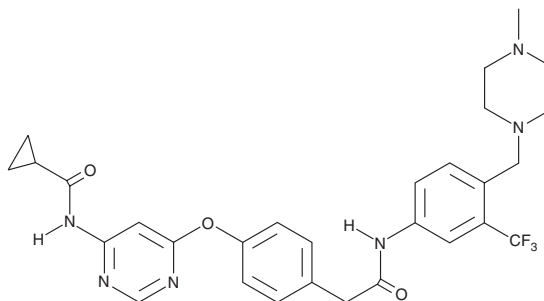


WS6

Item No. 17672

CAS Registry No.: 1421227-53-3
Formal Name: 4-[[6-[(cyclopropylcarbonyl)amino]-4-pyrimidinyl]oxy]-N-[4-[(4-methyl-1-piperazinyl)methyl]-3-(trifluoromethyl)phenyl]-benzeneacetamide

MF: C₂₉H₃₁F₃N₆O₃
FW: 568.6
Purity: ≥95%
UV/Vis.: λ_{max}: 244 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

WS6 is supplied as a crystalline solid. A stock solution may be made by dissolving the WS6 in the solvent of choice, which should be purged with an inert gas. WS6 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of WS6 in ethanol and DMSO is approximately 20 mg/ml and approximately 30 mg/ml in DMF.

WS6 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, WS6 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. WS6 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

WS6 is a compound that stimulates the proliferation of pancreatic β cells in rodent and human primary islets ($EC_{50} = 200$ and 400 nM, respectively, over four days).^{1,2} It promotes β cell growth *in vivo*, increasing β cell mass and normalizing blood glucose in the RIP-DTA mouse model of β cell ablation.¹ WS6 also stimulates α cell proliferation in human pancreatic islets.³ WS6 appears to act by inhibiting IKK ϵ and blocking the ability of EBP1 to suppress E2F-mediated transcription.¹

References

1. Shen, W., Tremblay, M. S., Deshmukh, V. A., *et al.* Small-molecule inducer of β cell proliferation identified by highthroughput screening. *J. Am. Chem. Soc.* **135**(5), 1669-1672 (2013).
2. Corritore, E., Lee, Y. S., Sokal, E. M., *et al.* β -cell replacement sources for type 1 diabetes: A focus on pancreatic ductal cells. *Therap. Adv. Endocrinol. Metab.* **7**(4), 182-199 (2014).
3. Boerner, B. P., George, N. M., Mir, S. U. R., *et al.* WS6 induces both alpha and β cell proliferation without affecting differentiation or viability. *Endocrine Journal* **62**(4), 379-386 (2015).

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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