PRODUCT INFORMATION



NGP-555

Item No. 27918

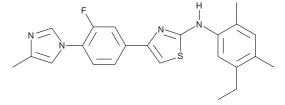
CAS Registry No.: 1304630-27-0

Formal Name: N-(5-ethyl-2,4-dimethylphenyl)-

> 4-[3-fluoro-4-(4-methyl-1H-imidazol-1-yl)phenyl]-2-

thiazolamine

MF: $C_{23}H_{23}FN_4S$ FW: 406.5 **Purity:** ≥95% Supplied as: A 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

NGP-555 is supplied as a solid. A stock solution may be made by dissolving the NGP-555 in the solvent of choice, which should be purged with an inert gas. NGP-555 is soluble in the organic solvent DMSO.

Description

NGP-555 is a modulator of y-secretase that inhibits APP intracellular signaling domain (AICD) cleavage to amyloid- β (A β ; IC₅₀s = 531 and 131 nM for A β 40 and A β 42, respectively, in HeLa cell membranes). It is selective for AICD cleavage to Aβ over E-cadherin and Notch cleavage to their signaling effectors, E-cadherin γ-C-terminal fragment and NICD, respectively, processes also mediated by γ-secretase, when used at a concentration of 30 μM. Dietary administration of NGP-555 (~50 mg/kg per day) reduces cortical and hippocampal plaque area in the Tg2576 transgenic mouse model of Alzheimer's disease. NGP-555 (25 mg/kg per day, p.o.) decreases plasma and brain Aβ40 and Aβ42 levels, as well as increases spontaneous alternations in the Y-maze, indicating prevention of memory deficits, in Tg2576 mice.²

References

- 1. Kounnas, M.Z., Danks, A.M., Cheng, S., et al. Modulation of γ-secretase reduces β-amyloid deposition in a transgenic mouse model of Alzheimer's disease. Neuron 67(5), 769-780 (2010).
- Kounnas, M.Z., Lane-Donovan, C., Nowakowski, D.W., et al. NGP 555, a γ-secretase modulator, lowers the amyloid biomarker, $A\beta_{42}$, in cerebrospinal fluid while preventing Alzheimer's disease cognitive decline in rodents. Alzheimers Dement. TRCI 3(1), 65-73 (2017).

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

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM