

PRODUCT INFORMATION



GSK106 (hydrochloride)

Item No. 17490

CAS Registry No.: 1652591-82-6
Formal Name: (3-amino-1-piperidiny)[2-(1-ethyl-1H-indol-2-yl)-1-methyl-1H-benzimidazol-6-yl]-methanone, monohydrochloride

MF: C₂₄H₂₇N₅O • HCl
FW: 438.0

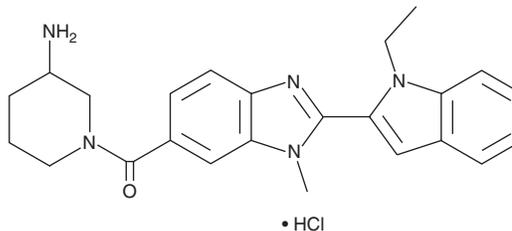
Purity: ≥98%

UV/Vis.: λ_{max}: 206, 320 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

GSK106 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the GSK106 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. GSK106 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of GSK106 (hydrochloride) in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of GSK106 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of GSK106 (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Protein arginine deiminase 4 (PAD4) mediates the transformation of protein arginine into citrulline. Citrullination of proteins has normal roles in gene regulation and pathological roles in immunological and inflammatory diseases.¹ GSK106 is an inactive control for the selective PAD4 inhibitors, GSK484 (Item No. 17488) and GSK199 (Item No. 17489).² It does not inhibit PAD4 nor does it prevent the citrullination of PAD4 target proteins or the formation of neutrophil extracellular traps in mouse or human neutrophils (IC₅₀s > 100 μM).² See the Structural Genomics Consortium (SGC) website for more information on both GSK484 and GSK106.

References

1. Jones, J.E., Causey, C.P., Knuckley, B., *et al.* Protein arginine deiminase 4 (PAD4): Current understanding and future therapeutic potential. *Curr. Opin. Drug Discov. Devel.* **12**(5), 616-627 (2009).
2. Lewis, H.D., Liddle, J., Coote, J.E., *et al.* Inhibition of PAD4 activity is sufficient to disrupt mouse and human NET formation. *Nat. Chem. Biol.* **11**(3), 189-191 (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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