

PRODUCT INFORMATION



DB2313 (hydrochloride)

Item No. 35021

Formal Name: 2,2'-[(2-fluoro-1,3-phenylene)bis(methyleneoxy-4,1-phenylene)]bis[N-(1-methylethyl)-1H-benzimidazole-6-carboximidamide, hydrochloride

MF: C₄₂H₄₁FN₈O₂ • XHCl

FW: 708.8

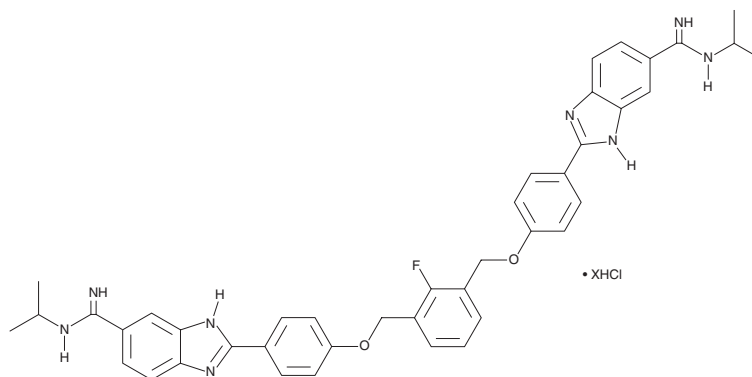
Purity: ≥98%

UV/Vis.: λ_{max}: 223, 264, 316 nm

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

DB2313 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the DB2313 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. DB2313 (hydrochloride) is soluble in DMSO.

Description

DB2313 is an inhibitor of the transcription factor PU.1 (IC₅₀ = 14 nM).¹ Long-term exposure of DB2313 (300 nM) to Kit⁺/Sca-1⁺/Lin⁻ hematopoietic stem progenitor cells (KSL-HSPCs) reduces colony formation. DB2313 (700 nM) decreases ovalbumin-induced reprogramming of isolated mouse neutrophils into antigen-presenting cells.² It decreases tumor growth, weight, and volume in a U87MG glioblastoma multiforme mouse xenograft model when administered at a dose of 10 mg/kg per day.³

References

1. Antony-Debré, I., Paul, A., Leite, J., *et al.* Pharmacological inhibition of the transcription factor PU.1 in leukemia. *J. Clin. Invest.* **127**(12), 4297-4313 (2017).
2. Mysore, V., Cullere, X., Mears, J., *et al.* FcγR engagement reprograms neutrophils into antigen cross-presenting cells that elicit acquired anti-tumor immunity. *Nat. Commun.* **12**(1), 4791 (2021).
3. Zhang, S., Zhao, S., Qi, Y., *et al.* SPI1-induced downregulation of FTO promotes GBM progression by regulating pri-miR-10a processing in an m6A-dependent manner. *Mol. Ther. Nucleic Acids* **27**, 699-717 (2022).

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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