

PRODUCT INFORMATION

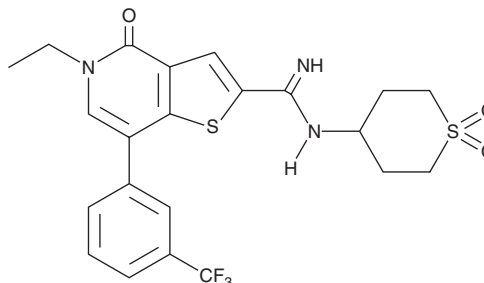


I-BRD9

Item No. 17749

CAS Registry No.: 1714146-59-4
Formal Name: 5-ethyl-4,5-dihydro-4-oxo-N-(tetrahydro-1,1-dioxido-2H-thiopyran-4-yl)-7-[3-(trifluoromethyl)phenyl]-thieno[3,2-c]pyridine-2-carboximidamide

MF: C₂₂H₂₂F₃N₃O₃S₂
FW: 497.6
Purity: ≥98%
UV/Vis.: λ_{max}: 292, 334 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

I-BRD9 is supplied as a crystalline solid. A stock solution may be made by dissolving the I-BRD9 in the solvent of choice, which should be purged with an inert gas. I-BRD9 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of I-BRD9 in these solvents is approximately 25 and 30 mg/ml.

I-BRD9 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, I-BRD9 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. I-BRD9 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

BRD9 contains a single bromodomain and has five isoforms that are produced by alternative splicing.¹ It is thought to function in chromatin remodeling as part of the SWI/SNF complex. I-BRD9 is a BRD9 bromodomain inhibitor with a pIC₅₀ value of 7.3 and a pK_d value of 8.7.² It displays 700-fold greater selectivity over the tandem bromodomain-containing BET family of proteins and 200-fold selectivity over the highly homologous BRD7 bromodomain.² This compound has been used to identify genes regulated by BRD9 in Kasumi-1 cells involved in cancer and immune response signaling.² See the Structural Genomics Consortium (SGC) website for more information.

References

1. Muller, S., Filippakopoulos, P., and Knapp, S. Bromodomains as therapeutic targets. *Expert Rev. Mol. Med.* **13**, e29 (2011).
2. Theodoulou, N.H., Bamborough, P., Bannister, A.J., *et al.* Discovery of I-BRD9, a selective cell active chemical probe for bromodomain containing protein 9 inhibition. *J. Med. Chem.* **59**(4), 1425-1439 (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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/05/2022

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