PRODUCT INFORMATION



SGC0946 (trifluoroacetate salt)

Item No. 42012

Formal Name:	5-bromo-7-[5-deoxy-5-[[3- [[[[4-(1,1-dimethylethyl) phenyl]amino]carbonyl] amino]propyl](1-methylethyl)		Br NH ₂
	amino]-β-D-ribofuranosyl]-7H- pyrrolo[2,3-d]pyrimidin-4-amine, trifluoroacetate salt	N	но он
MF:	$C_{28}H_{40}BrN_7O_4 \bullet XCF_3COOH$		
FW:	618.6		
Purity:	≥98%		• XCF ₃ COOH
Supplied as:	A solid	→ N	
Storage:	-20°C	Н	
Stability:	≥ years		

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

SGC0946 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the SGC0946 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. SGC0946 (trifluoroacetate salt) is sparingly soluble (1-10 mg/ml) in ethanol and slightly soluble (0.1-1 mg/ml) in DMSO.

Description

SGC0946 is an inhibitor of the non-SET domain-containing methyltransferase DOT1L $(IC_{50} = 0.3 \text{ nM})$.¹ It is selective for DOT1L over a panel of 12 additional protein methyltransferases, DNA methyltransferase 1 (DNMT1), and a panel of 29 receptors and ion channels. SGC0946 reduces the levels of dimethylated lysine 79 on histone 3 (H3K79me2) in MCF-10A breast cancer cells (IC₅₀ = 8.8 nM). It selectively reduces the viability of isolated human cord blood cells transformed with an MLL-AF9 fusion oncogene over those transformed with a TLS-ERG fusion oncogene when used at concentrations of 1 and 5 μ M. Adoptive transfer of isolated human CD3⁺ T cells pre-incubated with SGC0946 (0.5 μ M) prevents weight loss, increases survival, and reduces hepatic and colonic lymphocyte infiltration in a xenogeneic mouse model of graft versus host disease (GVHD).²

References

- 1. Yu, W., Chory, E.J., Wernimont, A.K., et al. Catalytic site remodelling of the DOT1L methyltransferase by selective inhibitors. Nat. Commun. 3, 1288 (2012).
- 2. Kagoya, Y., Nakatsugawa, M., Saso, K., et al. DOT1L inhibition attenuates graft-versus-host disease by allogeneic T cells in adoptive immunotherapy models. Nat. Commun. 9(1), 1915 (2018).

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

SAFFTY DATA

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

uyer 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, 09/23/2024

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