

Product Data Sheet

Product Name: TH5487
Cat. No.: GC37776

Chemical Properties

Cas. No. 2304947-71-3

SMILES O=C(N1CCC(N(C2=CC=CC(Br)=C2N3)C3=O)CC1)NC4=CC=C(I)C=C4

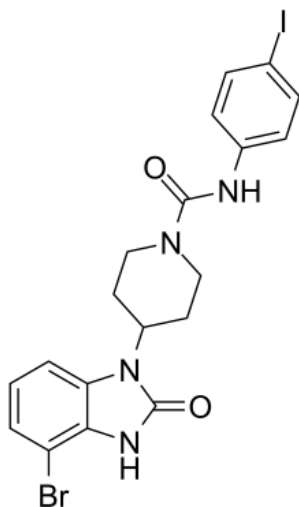
Formula $C_{19}H_{18}BrIN_4O_2$ M.Wt 541.18

Solubility DMSO: 25 mg/mL (46.20 mM) Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

TH5487 is a potent 8-oxoguanine DNA glycosylase 1 (OGG1) inhibitor with an IC₅₀ of 342 nM. TH5487 stops OGG1 from recognizing its DNA substrate, inhibits DNA repair and modifies OGG1 chromatin dynamics, which results in the inhibition of proinflammatory pathway genes[1].

TH5487 (5 µM; 1 hour) decreases TNFα- and LPS-induced proinflammatory gene expression to near pretreatment levels[1]. TH5487 (0-10 µM; 1 hour) perturbs binding of NF-κB to 8-oxoG-containing synthetic DNA in nuclear extracts from MLE 12 or hSAEC cells[1]. RT-PCR[1] Cell Line: Murine

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

airway epithelial cell line (MLE 12); Diploid human small-airway epithelial cell (hSAECs)

TH5487 (prophylactic intraperitoneally injection; 8-30 mg/kg; 1-9 hours) decreases TNF α or LPS induced the robust recruitment of neutrophils to the airways, and reduces the pulmonary neutrophil count in a time-dependent manner[1]. Animal Model: Eightweek-old female and male BALB/c mice[1]

[1]. Visnes T, et al. Small-molecule inhibitor of OGG1 suppresses proinflammatory gene expression and inflammation. Science. 2018 Nov 16;362(6416):834-839.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA