
Product Data Sheet

Product Name: KRAS G12D inhibitor 14

Cat. No.: GC69339

Chemical Properties

Cas. No. 2765254-39-3

Formula $C_{20}H_{19}F_3N_4OS$ M.Wt 420.45

Solubility 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**

KRAS G12D inhibitor 14 is a potent **KRAS G12D** inhibitor with a **K_D** of 33 nM for binding to KRAS G12D protein. KRAS G12D inhibitor 14 decreases the active form of KRAS G12D (KRAS G12D-GTP) but not KRAS G13D^[1].

KRAS G12D inhibitor 14 (compound KD-8) shows antiproliferative activity with an IC₅₀ of 2.1 μM against three KRAS G12D-mutated cells (Panc1, SW1990 and CT26). KRAS G12D inhibitor 14 decreases the active form of KRAS (KRAS-GTP) in KRAS G12D mutated cancer cell lines (CT26 and SW1990) but not in KRAS G13D mutated cancer cell lines (HCT116). KD-8 also causes efficient apoptosis of SW1990 and CT26 cancer cells. KRAS G12D inhibitor 14 down-regulates the phosphorylated Raf and Erk in CT26 and SW1990 cancer cell lines but not in HeLa cells (KRAS WT)^[1].

KRAS G12D inhibitor 14 (compound KD-8) (40 mg/kg or 60 mg/kg; i.p.) exhibits significant antitumor efficacy in a CT26 tumor model with a tumor growth inhibition (TGI) of 42% or 53% without causing apparent toxicity^[1].

[1]. Li L, et al. Discovery of Thieno[2,3-d]pyrimidine-based KRAS G12D inhibitors as potential anticancer agents via combinatorial virtual screening. Eur J Med Chem.

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

2022;233:114243.

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