Product Data Sheet

Chemical Properties

Product Name: MLN 2480
CAS No.: 1096708-71-2
M.Wt: 506.29
Formula: C17H12Cl2F3N7O2S
Synonyms: BIIB024, BIIB 024, BIIB-024, MLN2480, MLN 2480, MLN-2480
Chemical Name: 2-[(1R)-1-[(6-amino-5-chloropyrimidine-4-carbonyl)amino]ethyl]-N-[5-chloro-4-(trifluoromethyl)pyridin-2-yl]-1,3-thiazole-5-carboxamide
Canonical SMILES: CC(C1=NC=C(S1)(=O)NC2=NC=C(C=C2(F)(F)F)Cl)NC(=O)C3=C(C(=NC=N3)N)Cl
Solubility: ≥104 mg/mL in DMSO with gentle warming, insoluble in H2O, ≥50.6 mg/mL in EtOH with gentle warming
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.
Shopping Condition: Evaluation sample solution: ship with blue ice
All other available size: ship with RT, or blue ice upon request

Biological Activity

Targets: MAPK Signaling
Pathways: Raf
Description:
MLN2480 is an potent pan-RAF kinase inhibitor.
In vitro: MLN2480 inhibits MAPK pathway signaling in BRAF mutant and some RAS mutant
preclinical cancer models at concentrations that are tolerated in vivo. In vitro analysis of this drug combination of MLN2480 and TAK-733 in cell proliferation assays demonstrates synergistic activity [1].

In vivo: MLN2480 is most potent in BRAF mutant melanoma models but also has single agent activity in some RAS mutant models. The MLN2480 and TAK-733 combination inhibits the growth of a broader range of RAS mutant tumor models than MLN2480 single agent, including primary human tumor xenograft models of melanoma and CRC [2].

Clinical trial: In the first-in-human study (n=24), the safety profile of MLN2480 up to 200 mg Q2D was acceptable. Accrual continues at 200 mg to confirm the MTD [2].

Reference:
[1] Elizabeth Grace Carideo Cunniff, Julie Zhang, Jouhara Chouitar, et al. Combination treatment with the investigational RAF kinase inhibitor MLN2480 and the investigational MEK kinase inhibitor TAK-733 inhibits the growth of BRAF mutant and RAS mutant preclinical models of melanoma and CRC. Mol Cancer Ther November 2013 12; C146

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.