

# PRODUCT INFORMATION



## MLN2480

Item No. 19675

**CAS Registry No.:** 1096708-71-2  
**Formal Name:** 6-amino-5-chloro-N-[(1R)-1-[5-[[[5-chloro-4-(trifluoromethyl)-2-pyridinyl]amino]carbonyl]-2-thiazolyl]ethyl]-4-pyrimidinecarboxamide

**Synonyms:** BIIB-024, TAK-580

**MF:** C<sub>17</sub>H<sub>12</sub>Cl<sub>2</sub>F<sub>3</sub>N<sub>7</sub>O<sub>2</sub>S

**FW:** 506.3

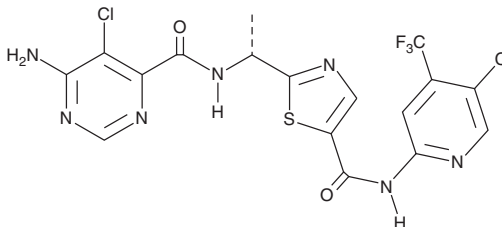
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 237, 276, 303 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

MLN2480 is supplied as a crystalline solid. A stock solution may be made by dissolving the MLN2480 in the solvent of choice, which should be purged with an inert gas. MLN2480 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of MLN2480 in ethanol and DMSO is approximately 20 mg/ml and approximately 30 mg/ml in DMF.

MLN2480 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MLN2480 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. MLN2480 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

MLN2480 is an orally bioavailable pan-Raf kinase inhibitor that inhibits MAP kinase pathway signaling in BRAF-mutant melanoma models.<sup>1</sup> It shows antitumor activity in melanoma, colon, lung, and pancreatic cancer xenograft models.<sup>2</sup> MLN2480 demonstrates synergistic activity with TAK-733, an allosteric MEK kinase inhibitor.<sup>3</sup>

### References

- Whittaker, S.R., Cowley, G.S., Wagner, S., *et al.* Combined pan-RAF and MEK inhibition overcomes multiple resistance mechanisms to selective RAF inhibitors. *Mol. Cancer Ther.* **14**(12), 2700-2711 (2015).
- Rasco, D.W., Olszanski, A.J., Patnaik, A., *et al.* MLN2480, an investigational oral pan-RAF kinase inhibitor, in patients (pts) with relapsed or refractory solid tumors: Phase I study. *J. Clin. Oncol.* **31**(suppl 15), (2013).
- Cunniff, E.G.C., Zhang, J., Chouitar, J., *et al.* Use of combination treatment with the investigational RAF kinase inhibitor MLN2480 and the investigational MEK kinase inhibitor TAK-733 on the growth of BRAF-mutant and RAS-mutant preclinical models of melanoma and CRC. *J. Clin. Oncol.* **31**(15 Suppl), (2013).

#### 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.

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