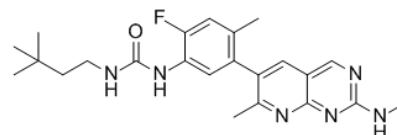


**Product Name** : LY3009120  
**Cat. No.** : PC-43107  
**CAS No.** : 1454682-72-4  
**Molecular Formula** : C<sub>23</sub>H<sub>29</sub>FN<sub>6</sub>O  
**Molecular Weight** : 424.5144  
**Target** : Raf  
**Solubility** : DMSO: ≥ 38 mg/mL



## Biological Activity

LY3009120 (DP-4978) is a potent **pan-RAF** and RAF dimer inhibitor with IC<sub>50</sub> of 5.8, 9.1 and 15 nM for BRAF V600E, BRAF WT and CRAF WT, respectively.

LY3009120 (DP-4978) inhibits ARAF, BRAF, and CRAF isoforms with similar affinity (4, 31-47 and 42 nM for ARAF, BRAF and CRAF), induces BRAF-CRAF dimerization but inhibits the phosphorylation of downstream MEK and ERK, also inhibits various forms of RAF dimers including BRAF or CRAF homodimers.

LY3009120 (DP-4978) exhibits anti-proliferative effects on cell lines harboring BRAF V600E, KRAS G13 and KRAS G12 mutations, inhibits cell growth of H2405, BxPC-3, and OV-90 cells (IC<sub>50</sub>=0.04, 0.087, and 0.007 μM).

LY3009120 (DP-4978) displays significant activity in in vivo BRAF mut and KRAS mut CRC xenograft models.

## References

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Chen SH, et al. *Cancer Discov.* 2016 Mar;6(3):300-15.

Vakana E, et al. *Oncotarget.* 2017 Feb 7;8(6):9251-9266.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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