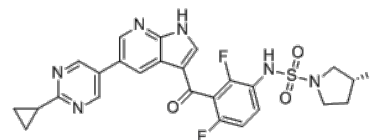


**Product Name** : PLX8394  
**Cat. No.** : PC-72242  
**CAS No.** : 1393466-87-9  
**Molecular Formula** : C<sub>25</sub>H<sub>21</sub>F<sub>3</sub>N<sub>6</sub>O<sub>3</sub>S  
**Molecular Weight** : 542.54  
**Target** : Raf  
**Solubility** : 10 mM in DMSO



## Biological Activity

PLX8394 (Plixorafenib, PLX-8394) is a next-generation, orally available, small-molecule **BRAF** inhibitor with IC<sub>50</sub> values of 3.8 nM, 14 nM and 23 nM for BRAF (V600E), WT BRAF and CRAF, respectively. PLX8394 suppresses mutant BRAF cells without activating the MAPK pathway in cells bearing upstream activation, overcame several known mechanisms of resistance to first-generation RAF inhibitors. PLX8394 inhibits ERK signaling by specifically disrupting BRAF-containing dimers, including BRAF homodimers and BRAF-CRAF heterodimers, but not CRAF homodimers or ARAF-containing dimers. As a BRAF-specific dimer breaker, PLX8394 selectively inhibits ERK signaling in tumors driven by dimeric BRAF mutants, including BRAF fusions and splice variants as well as BRAF V600 monomers, but spares RAF function in normal cells in which CRAF homodimers can drive signaling.

## References

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Tutuka CSA, et al. *Mol Cancer*. 2017 Jun 28;16(1):112.  
Hartsough EJ, et al. *Mol Cancer Ther*. 2018 Jan;17(1):84-95.  
Yao Z, et al. *Nat Med*. 2019 Feb;25(2):284-291.

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

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