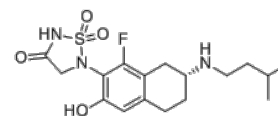


Product Name : ABBV-CLS-484
Cat. No. : PC-73317
CAS No. : 2489404-97-7
Molecular Formula : C₁₇H₂₄FN₃O₄S
Molecular Weight : 385.454
Target : Protein Phosphatase/PTP
Solubility : 10 mM in DMSO



1. Baumgartner CK, et al. *Nature*. 2023 Oct 4. doi: 10.1038/s41586-023-06575-7.
2. Liang S, et al. *Nat Commun*. 2023 Jul 27;14(1):4524.

Biological Activity

ABBV-CLS-484 (AC484, Osunprotafib) is a first-in-class, orally bioavailable, potent and selective **PTPN2** and **PTPN1** active-site inhibitor with IC₅₀ of 1.8 and 2.5 nM, respectively.

ABBV-CLS-484 (AC484) demonstrates high selectivity for PTPN2/N1, with 6-8-fold weaker activity on PTPN9 and no detectable activity on SHP-1 or SHP-2.

ABBV-CLS-484 (AC484) shows no off-target activity for a diverse panel of phosphatases, kinases and other receptors, including the hERG channel.

ABBV-CLS-484 (AC484) increases IFN γ -mediated STAT1 phosphorylation in B16 tumour cells with EC₅₀ of 176 nM.

ABBV-CLS-484 (AC484) phenocopies the effects of deletion of both Ptpn2 and Ptpn1 on cell growth and ISG expression in response to IFN, and enhances tumour sensitivity to T cell-mediated toxicity in tumor cells.

ABBV-CLS-484 (AC484) enhances T cell function in vitro, which is more potently than single targeting approaches.

ABBV-CLS-484 (AC484) induces immune-dependent tumour regression in various syngeneic and metastatic mouse models, shows efficacy in a broader range of contexts alone or in combination with anti-PD-1.

ABBV-CLS-484 (AC484) inflames the tumour microenvironment and promotes natural killer cell and CD8⁺ T cell function by enhancing JAK-STAT signalling and reducing T cell dysfunction.

References

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

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