

Product Name	: TAK-733
Synonyms	: TAK733; TAK 733
Cat No.	: M10176
CAS Number	: 1035555-63-5
Molecular Formula	: C ₁₇ H ₁₅ F ₂ IN ₄ O ₄
Formula Weight	: 504.23
Chemical Name	: Pyrido[2,3-d]pyrimidine-4,7(3H,8H)-dione, 3-[(2R)-2,3-dihydroxypropyl]-6-fluoro-5-[(2-fluoro-4-iodophenyl)amino]-8-methyl-
Description	TAK-733 (TAK733, TAK 733) is a potent, selective, allosteric inhibitor of MEK with IC₅₀ of 3.2 nM (MEK1); shows selectivity for MEK1 over a panel of 18 kinases, receptors, and ion channels at uM; inhibits ERK phosphorylation in vitro with EC₅₀ of 1.9 nM, also inhibits proliferation of A375 and COLO 205 cells with IC₅₀ of 3.1 nM and 2.1 nM, respectively; as well as 14 cutaneous melanoma cell lines (IC₅₀s=<1-10 nM), especially in those with B-RAFV600E mutations; demonstrates antitumor activity in multiple mouse xenograft models. Solid Tumors Phase 1 Discontinued
Pathway	: MAPK/ERK Signaling
Target	: MEK
Receptor	: MEK1
Solubility	: DMSO: ≥ 33 mg/mL
SMILES	: <chem>O=C1C(C(NC2=CC=C(I)C=C2F)=C(F)C(N3C)=O)=C3N=CN1C[C@@H](O)CO</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Dong Q, et al. Bioorg Med Chem Lett. 2011 Mar 1;21(5):1315-9. 2. von Euw E, et al. Mol Cancer. 2012 Apr 19;11:22. 3. Dahlman KB, et al. Cancer Discov. 2012 Sep;2(9):791-7. 4. Micel LN, et al. Mol Cancer Ther. 2015 Feb;14(2):317-25.

