

Product data sheet



MedKoo Cat#: 206933 Name: DUN61488 CAS#: 1807861-48-8 Chemical Formula: C ₂₄ H ₂₃ F ₃ N ₄ O Exact Mass: 440.1824 Molecular Weight: 440.4702	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

DUN61488, also known as 2,4,6,7,8,9-Hexahydro-7-(phenylmethyl)-4-[[4-(trifluoromethyl)phenyl]methyl]imidazo[1,2-a]pyrido[3,4-e]pyrimidin-5(1H)-one is a chemical reagent for research use. It has CAS#1807861-48-8. According to MedKoo Chemical Nomenclature ((see web page: <https://www.medkoo.com/page/naming>), this chemical can be named as DUN61488.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMF	1.0	2.27
DMSO	25.5	57.89
DMSO:PBS (pH 7.2) (1:3)	0.25	0.57

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.27 mL	11.35 mL	22.70 mL
5 mM	0.45 mL	2.27 mL	4.54 mL
10 mM	0.23 mL	1.14 mL	2.27 mL
50 mM	0.05 mL	0.23 mL	0.45 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Ferrarini I, Louie A, Zhou L, El-Deiry WS. ONC212 is a Novel Mitocan Acting Synergistically with Glycolysis Inhibition in Pancreatic Cancer. *Mol Cancer Ther.* 2021 Sep;20(9):1572-1583. doi: 10.1158/1535-7163.MCT-20-0962. Epub 2021 Jun 17. PMID: 34224362; PMCID: PMC8419089.

2. Fatima N, Shen Y, Crassini K, Iwanowicz EJ, Lang H, Karanewsky DS, Christopherson RI, Mulligan SP, Best OG. The ClpP activator ONC-212 (TR-31) inhibits BCL2 and B-cell receptor signaling in CLL. *EJHaem.* 2021 Jan 14;2(1):81-93. doi: 10.1002/jha.2.160. PMID: 35846080; PMCID: PMC9175891.

In vivo study

1. Wagner J, Kline CL, Ralff MD, Lev A, Lulla A, Zhou L, Olson GL, Nallaganachu BR, Benes CH, Allen JE, Prabhu VV, Stogniew M, Oster W, El-Deiry WS. Preclinical evaluation of the imipridone family, analogs of clinical stage anti-cancer small molecule ONC201, reveals potent anti-cancer effects of ONC212. *Cell Cycle.* 2017 Oct 2;16(19):1790-1799. doi: 10.1080/15384101.2017.1325046. Epub 2017 May 10. PMID: 28489985; PMCID: PMC5628644.

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2. Lev A, Lulla AR, Wagner J, Ralff MD, Kiehl JB, Zhou Y, Benes CH, Prabhu VV, Oster W, Astsaturov I, Dicker DT, El-Deiry WS. Anti-pancreatic cancer activity of ONC212 involves the unfolded protein response (UPR) and is reduced by IGF1-R and GRP78/BIP. *Oncotarget*. 2017 Sep 12;8(47):81776-81793. doi: 10.18632/oncotarget.20819. PMID: 29137221; PMCID: PMC5669847.

7. Bioactivity

Biological target:

ONC212, a fluorinated-ONC201 analogue, is a promising anti-cancer agent and also a selective agonist of GPR132.

In vitro activity

ONC-212 induced a significant ($P < .05$) accumulation of cells from both the OSU-CLL and OSU-CLL-*TP53*ko lines in G0/G1, with a concomitant decrease in the proportion of cells in G2/M at each of the three time points ($P < .05$; Figure 2A). In the *TP53*ko cells, a significant ($P < .05$) increase in the proportion of cells in S phase was also observed with ONC-212 treatment at each time point.

Reference: EJHaem. 2021 Jan 14;2(1):81-93. <https://pubmed.ncbi.nlm.nih.gov/35846080/>

In vivo activity

Immunohistochemical analyses of Ki67 and caspase-3 demonstrated that ONC212 reduced tumor-cell proliferation and induced apoptosis in UACC-903 and MALME xenografts to a greater extent than ONC201 (Fig. 7d, Fig. S4c).

Reference: *Cell Cycle*. 2017 Oct 2;16(19):1790-1799. <https://pubmed.ncbi.nlm.nih.gov/28489985/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.