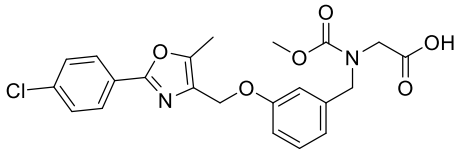
Product data sheet

MedKoo Cat#: 522700 Name: BMS-687453 CAS#: 1000998-59-3 Chemical Formula: $C_{22}H_{21}ClN_2O_6$ Exact Mass: 444.1088 Molecular Weight: 444.868	
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:
BMS-687453 is a potent and selective peroxisome proliferator activated receptor (PPAR) alpha agonist. with an EC(50) of 10 nM for human PPARalpha and approximately 410-fold selectivity vs human PPARgamma in PPAR-GAL4 transactivation assays. BMS-687453 demonstrated an excellent pharmacological and safety profile in preclinical studies and thus was chosen as a development candidate for the treatment of atherosclerosis and dyslipidemia.

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
DMSO	73.0	164.09
Ethanol	89.0	200.06

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.25 mL	11.24 mL	22.48 mL
5 mM	0.45 mL	2.25 mL	4.50 mL
10 mM	0.22 mL	1.12 mL	2.25 mL
50 mM	0.04 mL	0.22 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. Li J, Kennedy LJ, Shi Y, Tao S, Ye XY, Chen SY, Wang Y, Hernández AS, Wang W, Devasthale PV, Chen S, Lai Z, Zhang H, Wu S, Smirk RA, Bolton SA, Ryono DE, Zhang H, Lim NK, Chen BC, Locke KT, O'Malley KM, Zhang L, Srivastava RA, Miao B, Meyers DS, Monshizadegan H, Search D, Grimm D, Zhang R, Harrity T, Kunselman LK, Cap M, Kadiyala P, Hosagrahara V, Zhang L, Xu C, Li YX, Muckelbauer JK, Chang C, An Y, Krystek SR, Blanar MA, Zahler R, Mukherjee R, Cheng PT, Tino JA. Discovery of an oxybenzylglycine based peroxisome proliferator activated receptor alpha selective agonist 2-((3-((2-(4-chlorophenyl)-5-methyloxazol-4-yl)methoxy)benzyl)(methoxycarbonyl)amino)acetic acid (BMS-687453). J Med Chem. 2010 Apr 8;53(7):2854-64. doi: 10.1021/jm9016812. PMID: 20218621.

In vivo study

TBD

7. Bioactivity
Biological target:

Product data sheet

BMS-687453 is a potent and selective PPARα agonist, with an EC50 and IC50 of 10 nM and 260 nM for human PPARα and 4100 nM and >15000 nM for PPARγ in PPAR-GAL4 transactivation assays.

In vitro activity

An 1,3-oxybenzylglycine based compound 2 (BMS-687453) was discovered to be a potent and selective peroxisome proliferator activated receptor (PPAR) alpha agonist, with an EC(50) of 10 nM for human PPARalpha and approximately 410-fold selectivity vs human PPARgamma in PPAR-GAL4 transactivation assays.

Reference: J Med Chem. 2010 Apr 8;53(7):2854-64. https://pubmed.ncbi.nlm.nih.gov/20218621/

In vivo activity

TBD

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.