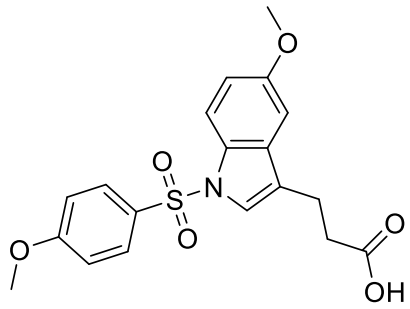
Product data sheet

MedKoo Cat#: 319853 Name: Indeglitazar CAS: 835619-41-5 Chemical Formula: $C_{19}H_{19}NO_6S$ Exact Mass: 389.0933 Molecular Weight: 389.422	
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:
Indeglitazar, also known as PPM-204 and PLX-204, is an orally available peroxisome proliferator-activated receptor (PPAR) pan-agonist for all three PPAR subtypes alpha (α), delta (δ) and gamma under development for for Type 2 diabetes mellitus (T2DM).

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	100.0	256.79

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.57 mL	12.84 mL	25.68 mL
5 mM	0.51 mL	2.57 mL	5.14 mL
10 mM	0.26 mL	1.28 mL	2.57 mL
50 mM	0.05 mL	0.26 mL	0.51 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. Artis DR, Lin JJ, Zhang C, Wang W, Mehra U, Perreault M, Erbe D, Krupka HI, England BP, Arnold J, Plotnikov AN, Marimuthu A, Nguyen H, Will S, Signaevsky M, Kral J, Cantwell J, Settachatgull C, Yan DS, Fong D, Oh A, Shi S, Womack P, Powell B, Habets G, West BL, Zhang KY, Milburn MV, Vlasuk GP, Hirth KP, Nolop K, Bollag G, Ibrahim PN, Tobin JF. Scaffold-based discovery of indeglitazar, a PPAR pan-active anti-diabetic agent. Proc Natl Acad Sci U S A. 2009 Jan 6;106(1):262-7. doi: 10.1073/pnas.0811325106. Epub 2008 Dec 30. PMID: 19116277; PMCID: PMC2629228.

In vivo study

1. Artis DR, Lin JJ, Zhang C, Wang W, Mehra U, Perreault M, Erbe D, Krupka HI, England BP, Arnold J, Plotnikov AN, Marimuthu A, Nguyen H, Will S, Signaevsky M, Kral J, Cantwell J, Settachatgull C, Yan DS, Fong D, Oh A, Shi S, Womack P, Powell B, Habets G, West BL, Zhang KY, Milburn MV, Vlasuk GP, Hirth KP, Nolop K, Bollag G, Ibrahim PN, Tobin JF. Scaffold-based discovery of indeglitazar, a PPAR pan-active anti-diabetic agent. Proc Natl Acad Sci U S A. 2009 Jan 6;106(1):262-7. doi: 10.1073/pnas.0811325106. Epub 2008 Dec 30. PMID: 19116277; PMCID: PMC2629228.

7. Bioactivity
Biological target:
Indeglitazar (PPM 204) is an orally available PPAR pan-agonist for all three PPARα, PPARδ and PPARγ.

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In vitro activity

In an assay of preadipocyte differentiation, measuring in part functional insulin sensitization capability of the cells, indeglitazar showed an EC50 of 0.32 μM compared with rosiglitazone, which showed an EC50 of 0.013 μM, although the maximal response obtained from the 2 compounds was comparable (Fig. 2D).

Reference: Proc Natl Acad Sci U S A. 2009 Jan 6;106(1):262-7. https://pubmed.ncbi.nlm.nih.gov/19116277/

In vivo activity

Indeglitazar significantly decreased glucose, insulin, triglycerides, and free fatty acid levels (Table 3). These effects were comparable to pioglitazone on reducing glucose levels, triglycerides, and free fatty acids, although a significantly greater reduction of insulin levels were observed. As expected, pioglitazone increased adiponectin levels 3.5-fold, whereas indeglitazar raised adiponectin levels only 1.9-fold (Fig. 2F and Table 3). These data are consistent with the partial agonism observed in cell-based studies and also suggest that the insulin sensitizing activities of indeglitazar are at least partially independent of adiponectin.

Reference: Proc Natl Acad Sci U S A. 2009 Jan 6;106(1):262-7. https://pubmed.ncbi.nlm.nih.gov/19116277/