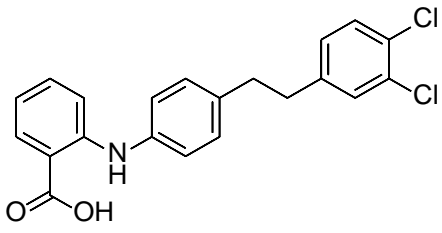


# Product data sheet



MedKoo Cat#: 561213 Name: PD-118057 CAS: 313674-97-4 Chemical Formula: C <sub>21</sub> H <sub>17</sub> Cl <sub>2</sub> NO <sub>2</sub> Exact Mass: 385.0636 Molecular Weight: 386.272	
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:

PD-118057 is a hERG channel enhancer. Human ether-a-go-go-related gene 1 (hERG1) K(+) channels mediate repolarization of cardiac action potentials.

## 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
TBD	TBD	TBD

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.59 mL	12.94 mL	25.89 mL
5 mM	0.52 mL	2.59 mL	5.18 mL
10 mM	0.26 mL	1.29 mL	2.59 mL
50 mM	0.05 mL	0.26 mL	0.52 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. Mao H, Lu X, Karush JM, Huang X, Yang X, Ba Y, Wang Y, Liu N, Zhou J, Lian J. Pharmacologic Approach to Defective Protein Trafficking in the E637K-hERG Mutant with PD-118057 and Thapsigargin. PLoS One. 2013 Jun 19;8(6):e65481. doi: 10.1371/journal.pone.0065481. PMID: 23840331; PMCID: PMC3686757.

2. Yeung SY, Greenwood IA. Pharmacological and biophysical isolation of K<sup>+</sup> currents encoded by ether-à-go-go-related genes in murine hepatic portal vein smooth muscle cells. Am J Physiol Cell Physiol. 2007 Jan;292(1):C468-76. doi: 10.1152/ajpcell.00142.2006. Epub 2006 Jul 26. PMID: 16870833.

In vivo study

TBD

## 7. Bioactivity

Biological target:

PD-118057 is a hERG channel activator without causing hERG blockade.

In vitro activity

In this study, PD-118057 was shown to significantly enhance both the maximum current amplitude and tail current amplitude, but did not alter the gating and kinetic properties of the WT-hERG channel, with the exception of accelerating steady-state inactivation.

# Product data sheet



Additionally, thapsigargin shows a similar result as PD-118057 for the WT-hERG channel, but with the exception of attenuating steady-state inactivation.

Reference: PLoS One. 2013 Jun 19;8(6):e65481. <https://pubmed.ncbi.nlm.nih.gov/23840331/>

In vivo activity

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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.*