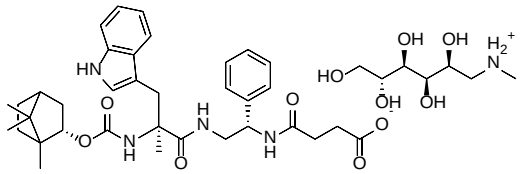
Product data sheet

MedKoo Cat#: 525842 Name: PD 135158 CAS: 130325-35-8 Chemical Formula: $C_{42}H_{61}N_5O_{11}$ Exact Mass: 811.4368 Molecular Weight: 811.9606	
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 135158 is a Selective cholecystokinin type B (CCKB)/gastrin receptor agonist. In studies, PD- 135158 stimulates lipase release from isolated rat pancreatic acini dose dependently in a biphasic manner, with identical efficacy but lower potency compared to cholecystokinin octapeptide (CCK-8). PD 135158 is classified into Anti-Anxiety Agents, Central Nervous System Agents, Central Nervous System Depressants, Psychotropic Drugs, and Tranquilizing Agents.

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	1.23 mL	6.16 mL	12.32 mL
5 mM	0.25 mL	1.23 mL	2.46 mL
10 mM	0.12 mL	0.62 mL	1.23 mL
50 mM	0.03 mL	0.12 mL	0.25 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. Blackburn-Munro G, Dickinson T, Fleetwood-Walker SM. Non-opioid actions of lamotrigine within the rat dorsal horn after inflammation and neuropathic nerve damage. Neurosci Res. 2001 Apr;39(4):385-90. doi: 10.1016/s0168-0102(00)00239-x. PMID: 11274737.

In vivo study

1. Gracey DJ, Bell R, King DJ. PD-135,158, a cholecystokinin(B) antagonist, enhances latent inhibition in the rat. Pharmacol Biochem Behav. 2000 Mar;65(3):459-63. doi: 10.1016/s0091-3057(99)00227-0. PMID: 10683486.

2. Tsutsumi T, Akiyoshi J, Isogawa K, Kohno Y, Hikichi T, Nagayama H. Suppression of conditioned fear by administration of CCKB receptor antagonist PD135158. Neuropeptides. 1999 Dec;33(6):483-6. doi: 10.1054/npep.1999.0766. PMID: 10657528.

7. Bioactivity
Biological target:

PD 135158 is a Selective cholecystokinin type B (CCKB)/gastrin receptor agonist.

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In vitro activity

Both lamotrigine and the mu-opioid agonist DAMGO inhibited mustard oil-evoked cell firing by approximately 50% compared with control levels. Co-application of CCK8S reversed DAMGO-, but not lamotrigine-induced inhibition of cell firing and this reversal was prevented with the selective CCK(B) receptor antagonist PD 135158.

Reference: Neurosci Res. 2001 Apr;39(4):385-90. https://pubmed.ncbi.nlm.nih.gov/11274737/

In vivo activity

The present study examined the effects of the selective CCK(B) antagonist PD-135,158 (0.001, 0. 01, and 0.1 mg/kg) using a conditioned suppression of drinking procedure in rats. For purposes of comparison the effects of haloperidol (0.1 mg/kg) were also investigated. PD-135,158 (0.1 mg/kg), similar to haloperidol (0.1 mg/kg), elicited a clear LI effect under conditions that did not lead to LI in control rats (low number of preexposures).

Reference: Pharmacol Biochem Behav. 2000 Mar;65(3):459-63. https://pubmed.ncbi.nlm.nih.gov/10683486/

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.