# **Product data sheet**



MedKoo Cat#: 462130		
Name: Galnon trifluoroacetate salt		
CAS#: 1217448-19-5		0
Chemical Formula: C <sub>42</sub> H <sub>47</sub> F <sub>3</sub> N <sub>4</sub> O <sub>8</sub>		
Exact Mass: 792.3346		O O O O O O O O O O O O O O O O O O O
Molecular Weight: 792.8532		
Product supplied as:	Powder	ONN NHF F
Purity (by HPLC):	≥ 98%	H Ö O NH2
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:

Galnon is a galanin (GAL) receptor agonist. It inhibits forskolin-induced adenylate cyclase activity in rat hippocampal membranes.

## 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	10.0	12.61
DMSO:PBS (pH 7.2)	0.3	0.38
(1:2)		
DMF	10.0	12.61

4. Stock solution preparation table:

To book solution preparation tables					
Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg		
1 mM	1.26 mL	6.31 mL	12.61 mL		
5 mM	0.25 mL	1.26 mL	2.52 mL		
10 mM	0.13 mL	0.63 mL	1.26 mL		
50 mM	0.03 mL	0.13 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. Rajarao SJ, Platt B, Sukoff SJ, Lin Q, Bender CN, Nieuwenhuijsen BW, Ring RH, Schechter LE, Rosenzweig-Lipson S, Beyer CE. Anxiolytic-like activity of the non-selective galanin receptor agonist, galnon. Neuropeptides. 2007 Oct;41(5):307-20. doi: 10.1016/j.npep.2007.05.001. Epub 2007 Jul 16. PMID: 17637475.

#### In vivo study

- 1. McGowan HW, Schuijers JA, Grills BL, McDonald SJ, McDonald AC. Galnon, a galanin receptor agonist, improves intrinsic cortical bone tissue properties but exacerbates bone loss in an ovariectomised rat model. J Musculoskelet Neuronal Interact. 2014 Jun;14(2):162-72. PMID: 24879020.
- 2. Badie-Mahdavi H, Behrens MM, Rebek J, Bartfai T. Effect of galnon on induction of long-term potentiation in dentate gyrus of C57BL/6 mice. Neuropeptides. 2005 Jun;39(3):249-51. doi: 10.1016/j.npep.2004.12.010. Epub 2005 Mar 19. PMID: 15944018.

## 7. Bioactivity

Biological target:

Non-selective galanin receptor agonist.

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### In vitro activity

In vitro, galnon and galanin showed affinity for human galanin receptors expressed in Bowes melanoma cells (K(i)=5.5 microM and 0.2 nM, respectively). Galnon (10 microM) showed affinity for NPY1, NK2, M5, and somatostatin receptors but no affinity for galanin receptors expressed in rat hippocampal membranes.

Reference: Neuropeptides. 2007 Oct;41(5):307-20. <a href="https://pubmed.ncbi.nlm.nih.gov/17637475/">https://pubmed.ncbi.nlm.nih.gov/17637475/</a>

#### In vivo activity

Administration of galnon (1 microM) in rats significantly attenuated the LTP induction by 85.5 +/- 1% by 51 min after high frequency trains stimulation.

Reference: Neuropeptides. 2005 Jun;39(3):249-51. https://pubmed.ncbi.nlm.nih.gov/15944018/

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.