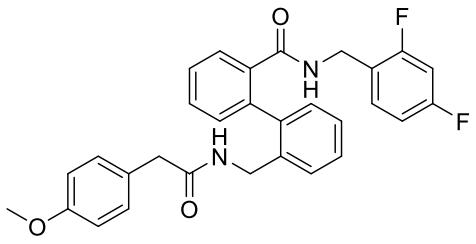
Product data sheet

MedKoo Cat#: 563499 Name: A1899 CAS#: 498577-46-1 Chemical Formula: $C_{30}H_{26}F_2N_2O_3$ Exact Mass: 500.1911 Molecular Weight: 500.54	
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:
A1899 is a potent and selective TASK-1 and TASK-3 antagonist.

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	50.05	99.99

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.00 mL	9.99 mL	19.98 mL
5 mM	0.40 mL	2.00 mL	4.00 mL
10 mM	0.20 mL	1.00 mL	2.00 mL
50 mM	0.04 mL	0.20 mL	0.40 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. O'Donohoe PB, Huskens N, Turner PJ, Pandit JJ, Buckler KJ. A1899, PK-THPP, ML365, and Doxapram inhibit endogenous TASK channels and excite calcium signaling in carotid body type-1 cells. Physiol Rep. 2018 Sep;6(19):e13876. doi: 10.14814/phy2.13876. PMID: 30284397; PMCID: PMC6170881.

In vivo study

TBD

7. Bioactivity
Biological target:

A1899 is a potent K2P3.1 (TASK-1) and K2P9.1 (TASK-3) channel blocker (IC50 values are 7 nM and 70 nM for human TASK-1 and TASK-3 expressed in CHO cells, respectively).

In vitro activity

In cell attached patches in type-1 cells 400 nmol/L A1899 caused a rapid and reversible inhibition of TASK channel activity by 34 ± 7% (n = 8; P = 0.028; Fig. 4A and B). A similar level of inhibition was also seen at a lower concentration of 50 nmol/L and a substantive further increase in inhibition at 4000 nmol/L to over 60% (see Fig. 4C). Figure 4D presents a representative all-points histogram which shows that at 400 nmol/L A1899 causes an inhibition of TASK channel activity across all conductance levels.

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Reference: Physiol Rep. 2018 Sep; 6(19): e13876. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6170881/

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.