# **Product data sheet**



MedKoo Cat#: 526852				
Name: AZD-8529 free base				
CAS#: 1092453-15-0 (free base)				
Chemical Formula: $C_{24}H_{24}F_3N_5O_3$				
Exact Mass: 487.1831				
Molecular Weight: 487.4832				
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:

AZD-8529 is a a positive allosteric modulator at the mGluR2 receptor. AZD8529 decreases Nicotine Self-Administration and Relapse in Squirrel Monkeys. AZD8529 potentiated agonist-induced activation of mGluR2 in the membrane-binding assay and in primate cortex, hippocampus, and striatum. In monkeys, AZD8529 decreased nicotine self-administration at doses (.3-3 mg/kg) that did not affect food self-administration. AZD8529 also reduced nicotine priming- and cue-induced reinstatement of nicotine seeking after extinction of the drug-reinforced responding. In rats, AZD8529 decreased nicotine-induced accumbens dopamine release. The positive allosteric modulators of metabotropic glutamate receptor 2 should be considered for relapse prevention.

#### 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	62.5	128.21

#### 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.05 mL	10.26 mL	20.51 mL
5 mM	0.41 mL	2.05 mL	4.10 mL
10 mM	0.21 mL	1.03 mL	2.05 mL
50 mM	0.04 mL	0.21 mL	0.41 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

TBD

In vivo study

1. Augier E, Dulman RS, Rauffenbart C, Augier G, Cross AJ, Heilig M. The mGluR2 Positive Allosteric Modulator, AZD8529, and Cue-Induced Relapse to Alcohol Seeking in Rats. Neuropsychopharmacology. 2016 Nov;41(12):2932-2940. doi: 10.1038/npp.2016.107. Epub 2016 Jun 24. PMID: 27339394; PMCID: PMC5061885.

2. Justinova Z, Panlilio LV, Secci ME, Redhi GH, Schindler CW, Cross AJ, Mrzljak L, Medd A, Shaham Y, Goldberg SR. The Novel Metabotropic Glutamate Receptor 2 Positive Allosteric Modulator, AZD8529, Decreases Nicotine Self-Administration and Relapse in Squirrel Monkeys. Biol Psychiatry. 2015 Oct 1;78(7):452-62. doi: 10.1016/j.biopsych.2015.01.014. Epub 2015 Feb 7. PMID: 25802079; PMCID: PMC4529372.

#### 7. Bioactivity

Biological target:

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AZD-8529 is a positive allosteric modulator of mGluR2, with an EC50 of 285 nM.



#### In vitro activity

TBD

### In vivo activity

One-way RM ANOVA showed that AZD8529 significantly decreased reinforcers ( $F_{3,93}=7.17$ , p<0.001, Figure 2a) and total ethanol intake ( $F_{3,93}=7.13$ , p<0.001, Figure 2b), as well as active lever presses ( $F_{3,93}=8.30$ , p<0.001, Figure 2c) while responses on the inactive lever remained low and unaffected ( $F_{3,93}=1.05$ , p=0.37, see Supplementary S2). Moreover, *post-hoc* analyses indicated a significant effect of the low dose of 20 mg/kg on reinforcers, total ethanol intake, and active responses compared with vehicle (p<0.01) but only a trend to reduce alcohol operant self-administration for the high dose of 40 mg/kg (p=0.054 for active lever presses, p=0.076 for reinforcers and p=0.071 for ethanol intake). The vehicle did not affect self-administration compared with baseline (p=0.99 for both reinforcers and lever presses). Thus AZD8529 significantly affected alcohol self-administration, but the magnitude was modest, with a decrease of only 18% compared with vehicle.

Reference: Neuropsychopharmacology. 2016 Nov; 41(12): 2932–2940. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5061885/

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.