

Catalog # 10-4085 ICA-121431

CAS# 313254-51-2 2,2-Diphenyl-N-[4-(1,3-thiazol-2-ylsulfamoyl)phenyl]acetamide Lot # FBA5125

ICA-121431 is a selective Nav1.1/1.3 inhibitor (hIC50s = 23 and 13 nM respectively; also selective for dog, monkey, and mouse, but not rat). It exclusively shifts voltage dependence to more negative voltages and accelerates entry into slow activation.²

- 1) McCormack et al. (2013), Voltage sensor interaction site for selective small molecule inhibitors of voltage-gated sodium channels: Proc. Natl. Acad. Sci. USA **110** E2724
- 2) Osteen et al. (2017), Pharmacology of the Nav1.1 domain IV voltage sensor reveals coupling between inactivation gating processes; Proc. Natl. Acad. Sci. USA 114 6836

PHYSICAL DATA

Molecular Weight: 449.54

 $\begin{tabular}{ll} Molecular Formula: & $C_{23}H_{19}N_3O_3S_2$ \\ Purity: & $>98\%$ by TLC \\ \end{tabular}$

NMR: (Conforms)

Solubility: DMSO (>25 mg/ml)
Physical Description: Off-white to beige solid

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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