

DATA SHEET

Product Name: SA4503

Catalog #: CV-1042

Alt: CAS # 165377-44-6; 1-(3,4-Dimethoxyphenethyl)-4-(3-phenylpropyl)piperazine, dihydrochloride; Cutamesine

Molecular Mass: 441.4

Analysis: >98% (TLC); NMR (conforms)

Supplied As: White powder

Resuspension: May be dissolved in DMSO (5 mg/ml); or water (25 mg/ml)

Storage: Store desiccated as supplied at -20°C for up to 2 years. Store solutions at -20°C for up to one month.

Description: SA4503 is a potent and selective sigma 1 agonist ($\sigma 1$ IC₅₀=17.4 nM, $\sigma 2$ IC₅₀=1784 nM). It has been investigated as a cognition enhancer^{2,3}, antidepressant^{4,5}, anti-addiction agent⁶, and neuroprotectant⁷⁻¹⁰.

References:

1. Matsuno, K., et al., (1996) Eur. J. Pharmacol., 306 : 271
2. Matsuno, K., et al., (1997) Behav. Brain Res., 83 : 221
3. Niitsu, T., et al., (2012) Curr. Pharm. Des., 18 : 875
4. Skuza, G., and Rogoz, Z., (2002) Behav. Pharmacol., 13 : 537
5. Lucas, G., et al., (2008) Int. J. Neuropsychopharmacol., 11 : 485
6. Mori, T., et al., (2014) Addict. Biol., 19 : 362
7. Nakazawa, M., et al., (1998) Neurochem. Int., 32 : 337
8. Ruscher, K., et al., (2011) Brain, 134(Pt3) : 732
9. Ruscher, K., et al., (2012) PLoS One, 7 : e45118
10. Yamashita, D., et al., (2015) Int. J. Neurosci. Res., 93 : 788

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