

Supporting information

Serotonin 2A receptor (5-HT_{2A}R) activation by 25H-NBOMe positional isomers: in vitro functional evaluation and molecular docking

Eline Pottie¹, Olga V. Kupriyanova^{2,3}, Asher L. Brandt⁴, Robert B. Laprairie^{4,5}, Vadim A. Shevyrin⁶, Christophe P. Stove^{1}*

¹ Laboratory of Toxicology, Department of Bioanalysis, Faculty of Pharmaceutical Sciences, Ghent University, Campus Heymans, Ottergemsesteenweg 460, B-9000 Ghent, Belgium

² Institute of Fundamental Medicine and Biology, Kazan (Volga Region) Federal University, Kazan, Russian Federation

³ Kazan State Medical University, Kazan, Russian Federation

⁴ College of Pharmacy and Nutrition, University of Saskatchewan, Saskatoon, Saskatchewan, Canada

⁵Department of Pharmacology, College of Medicine, Dalhousie University, Halifax, Nova Scotia, Canada

⁶ Ural Federal University, Institute of Chemistry and Technology, Ekaterinburg, Russian Federation

* Corresponding Author: Christophe Stove, Laboratory of Toxicology, Department of Bioanalysis, Faculty of Pharmaceutical Sciences, Ghent University, Ottergemsesteenweg 460, 9000 Ghent, Belgium, Phone: +32 9 264 81 35, Fax: +32 9 264 81 83, E-mail: christophe.stove@ugent.be

CONTENT

Figure S1 Visual representation of the docking of 25CN-NBOH and 23H-, 25H-, 26H-, and 34H-NBOMe in the binding pocket of the 5-HT_{2A}R.

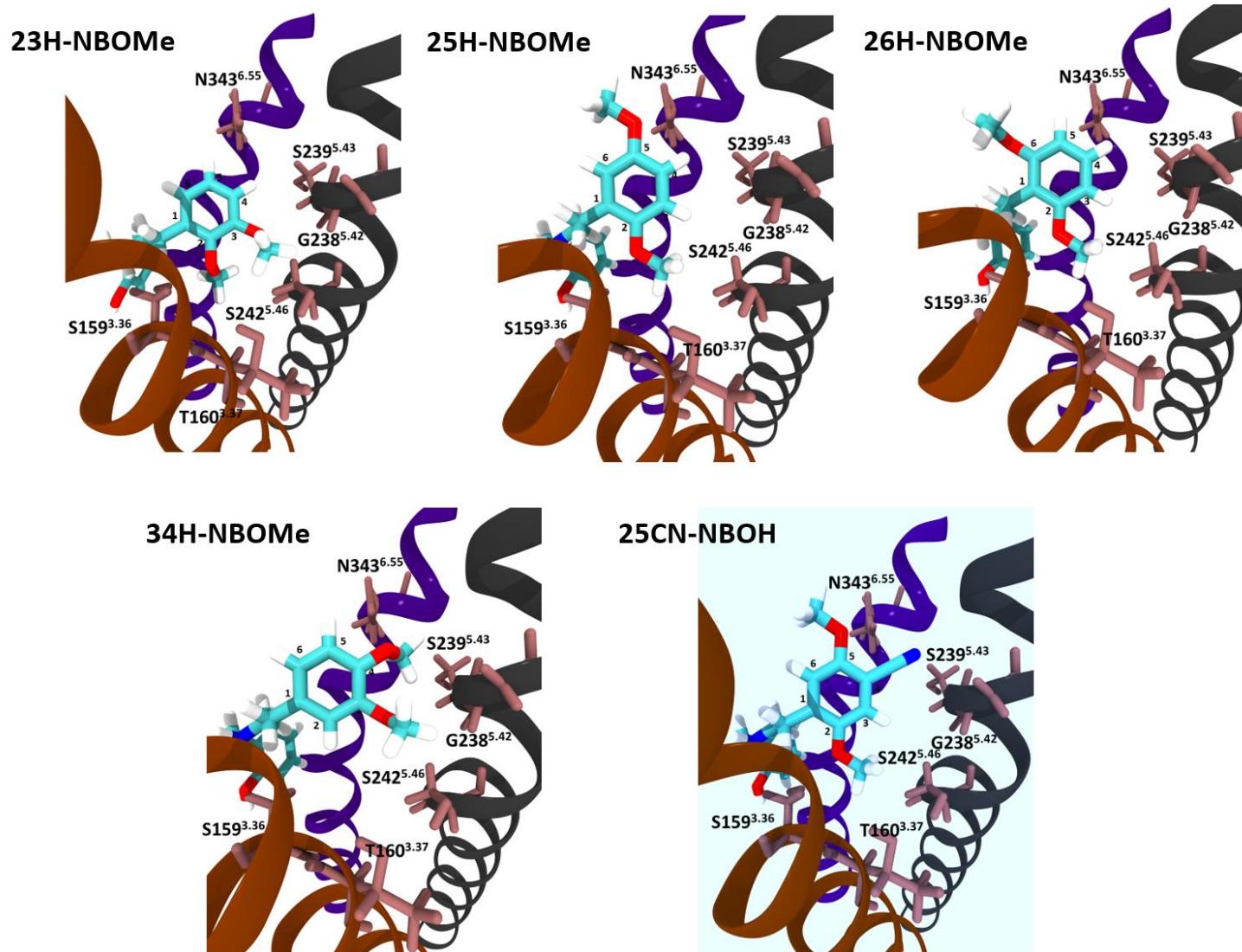


Figure S1: Visual representation of the docking of 25CN-NBOH, and 23H-, 25H-, 26H-, and 34H-NBOMe in the binding pocket of the 5-HT₂AR (PDB: 6WHA)¹. The specified residues are those specifically hypothesized to interact with the specific methoxy groups on the phenethylamine moiety.

REFERENCE

1. Kim, K.; Che, T.; Panova, O.; DiBerto, J. F.; Lyu, J.; Krumm, B. E.; Wacker, D.; Robertson, M. J.; Seven, A. B.; Nichols, D. E.; Shoichet, B. K.; Skiniotis, G.; Roth, B. L., Structure of a Hallucinogen-Activated Gq-Coupled 5-HT2A Serotonin Receptor. *Cell* **2020**, 182 (6), 1574-1588 e19.