

## Supplementary Information

### Interaction of Synthetic Human SLURP-1 with the Nicotinic Acetylcholine Receptors

Thomas Durek<sup>1,\*</sup>, Irina V. Shelukhina<sup>2</sup>, Han-Shen Tae<sup>3</sup>, Panumart Thongyoo<sup>1,5</sup>, Ekaterina N. Spirova<sup>2</sup>, Denis S. Kudryavtsev<sup>2</sup>, Igor E. Kasheverov<sup>2</sup>, Grazyna Faure<sup>4</sup>, Pierre-Jean Corringer<sup>4</sup>, David J. Craik<sup>1</sup>, David J. Adams<sup>3</sup> and Victor I. Tsetlin<sup>2,\*</sup>

<sup>1</sup>Institute for Molecular Bioscience, The University of Queensland, Brisbane, QLD 4072, Australia.

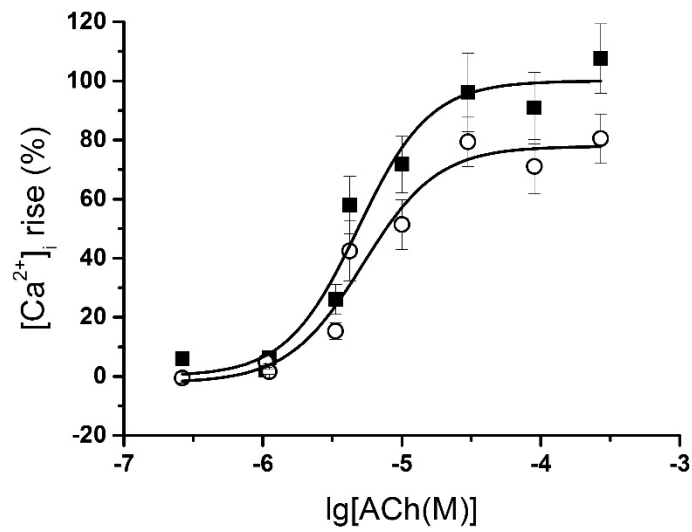
<sup>2</sup>Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, Moscow, 117997, Russia.

<sup>3</sup>Illawarra Health and Medical Research Institute (IHMRI), University of Wollongong, Wollongong, NSW 2522, Australia.

<sup>4</sup>Channel-Receptors Unit, Institut Pasteur, 75015 Paris, France; CNRS UMR 3571, 75015 Paris, France.

<sup>5</sup>present address: Faculty of Science and Technology, Thammasat University, Bangkok, Thailand

\*Correspondence and requests for materials should be addressed to V.I.T. (e-mail: [victortsetlin3f@gmail.com](mailto:victortsetlin3f@gmail.com)) or T.D. (e-mail: [t.durek@uq.edu.au](mailto:t.durek@uq.edu.au))



**Suppl. Fig. 1:** Activity of synthetic human SLURP-1 on acetylcholine (ACh)-evoked response mediated by mouse muscle nAChRs expressed in Neuro2a cells. Concentration-response curve of ACh-induced intracellular calcium ion concentration ( $[Ca^{2+}]_i$ ) rise in the absence (*black squares*,  $EC_{50} = 4.8 \pm 1.0 \mu M$ ) and presence of  $5 \mu M$  SLURP-1 (*open circles*,  $EC_{50} = 5.2 \pm 1.5 \mu M$ ). Mean  $\pm$  SEM,  $n = 5$ .