

## **Supporting information**

### **IMPROVEMENT OF KEY MOLECULAR EVENTS LINKED TO ALZHEIMER'S DISEASE PATHOLOGY USING POSTBIOTICS**

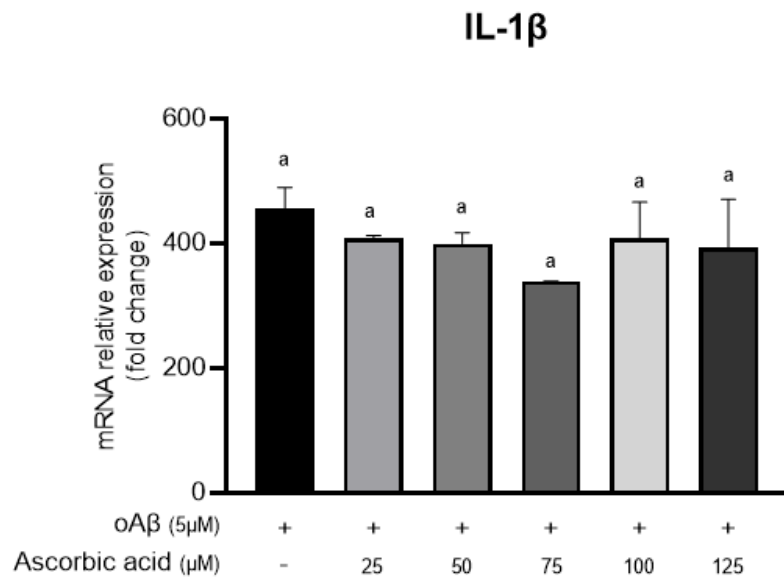
Gabriela Agustina Bulacios<sup>1</sup>, Pablo Gabriel Cataldo<sup>2</sup>, Johana Romina Naja<sup>1</sup>, Elena Posse de Chaves<sup>3</sup>, María Pía Taranto<sup>2</sup>, Carlos Javier Minahk<sup>4</sup>, Elvira María Hebert<sup>2\*</sup> and María Lucila Saavedra<sup>1\*</sup>

<sup>1</sup>Laboratorio de Genética y Biología Molecular, CERELA-CONICET, Centro de Referencia para Lactobacilos, Chacabuco 145, San Miguel de Tucumán (T4000ILC), Tucumán, Argentina.

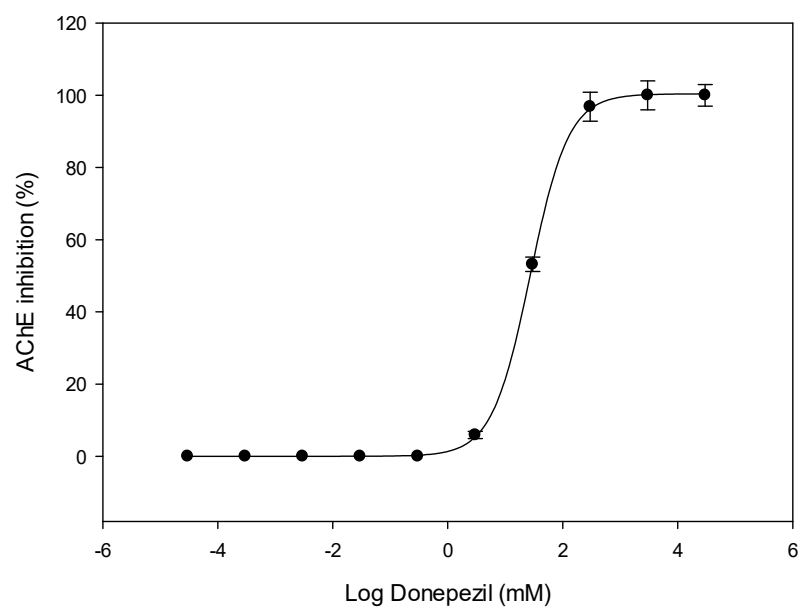
<sup>2</sup>Laboratorio de Tecnología, CERELA-CONICET, Centro de Referencia para Lactobacilos, Chacabuco 145, San Miguel de Tucumán (T4000ILC), Tucumán, Argentina.

<sup>3</sup> Departments of Pharmacology and Medicine and the Centre for Neuroscience, Faculty of Medicine and Dentistry, University of Alberta, Edmonton, Alberta T6G 2H7, Canada

<sup>4</sup> Instituto Superior de Investigaciones Biológicas, Chacabuco 461. San Miguel de Tucumán, Argentina.



**Fig. S1.** IL1 $\beta$  expression in BV2 cells following co-incubation of oA $\beta$ <sub>1-42</sub> (5 $\mu\text{M}$ ) with increasing concentrations of ascorbic acid (AA) for 8 h.



**Fig. S2.** Dose- response curve of donepezil inhibition on acetylcholinesterase activity from human erythrocytes (AChE-E) prepared as described in Material and Methods section. The AChE inhibition (%) is plotted vs logarithmic concentration of donepezil (3 fM to 30 $\mu$ M). The results are expressed as mean  $\pm$  standard deviation of three independent experiments. Data were fitted by a four-parametric logistic model.