

Supplemental Table 1. A $\beta$  peptides detected in MALDI-TOF analyzes of immunoprecipitates from temporal cortex of Arctic AD Sw2 patient brain.

A $\beta$ peptide sequence	A $\beta$ m/z predicted	IP: abA $\beta$ <sub>17-24</sub> /abA $\beta$ <sub>arc</sub> m/z_exp1	IP: abA $\beta$ <sub>17-24</sub> /abA $\beta$ <sub>arc</sub> m/z_exp2	IP: abA $\beta$ <sub>17-24</sub> /abA $\beta$ <sub>arc</sub> Relative Intensity_exp1	IP: abA $\beta$ <sub>17-24</sub> /abA $\beta$ <sub>arc</sub> Relative Intensity_exp2
18-42wt	2464.9	2463,471	2463,751	0,156	0,151
17-43wt	2679.2	2678,310	2678,711	1,000	1,000
11pE-40arc*	3062.6	3062,808	3061,445	0,222	0,200
11pE-42arc*	3246.8	3246,181	3245,964	0,335	0,295
9-42arc	3485.1	3482,913	3484,111	0,460	0,450
7-40arc formylated	3531.0	3530,302	3530,275	0,682	0,570
10-42wt formylated	3528.0	3530,302	3530,275	0,682	0,570
6-40wt oxidized	3728.2	3728,588	3728,212	0,109	0,114
5-40arc	3796.3	3792,777	3792,398	0,147	0,132
5-40wt oxidized	3884.4	3886,251	3886,635	0,241	0,198
4-40arc	3943.5	3943,952	3944,181	0,438	0,409
5-42arc oxidized	3996.6	3997,343	3997,012	0,322	0,280
3pE-40arc*	4054.6	4056,985	4056,985	0,163	0,204
1-40arc*	4258.8	4259,081	4258,680	0,140	0,123
1-42arc*	4443.1	4442,975	4443,544	0,438	0,375
1-45wt	4828.5	4828,407	4828,767	0,276	0,255

**Legend:** A $\beta$  peptides were measured in positive linear mode on AutoflexIII imager Bruker MALDI-TOF spectrometer in two independent experiments (named as exp1 and exp2). All *m/z* listed represent  $[M_{av}+H]^+$  ( $\pm 3$  Da), after smoothing and background subtraction. Extraction of A $\beta$  peptides was performed in 99% formic acid. Immunoprecipitation (IP) was performed with abA $\beta$ <sub>17-24</sub> (Mab4G8) and abA $\beta$ <sub>arc</sub> (Mab27) antibodies. Asterisks mark peaks labeled in **Figure 3e**. Molecular weight (*m/z*) in Daltons (Da). Relative intensities of the peaks in relation to the most intensive peak (A $\beta$ 17-43wt) were calculated with FlexAnalysis 3.4 software (Bruker Daltonics). The data from experiment 1 were presented in Philipson et al. *Neurobiol Aging* (2012), **33**: 1010 e1011-1013 [35].