

Supplementary Data

Postmortem Pittsburgh Compound B (PiB) Binding Increases with Alzheimer's Disease Progression

Tina L. Beckett^{a,1}, Robin L. Webb^{b,1}, Dana M. Niedowicz^{a,b,1}, Christopher J. Holler^b, Sergey Matveev^{a,b}, Irfan Baig^{a,b}, Harry LeVine III^{a,b,*}, Jeffrey N. Keller^{c,*} and M. Paul Murphy^{a,b,*}

^aSanders-Brown Center on Aging, University of Kentucky, Lexington, KY, USA

^bDepartment of Molecular and Cellular Biochemistry, University of Kentucky, Lexington, KY, USA

^cPennington Biomedical Research Center/Louisiana State University System, Baton Rouge, LA, USA

Handling Associate Editor: Peter Nelson

Accepted 28 May 2012

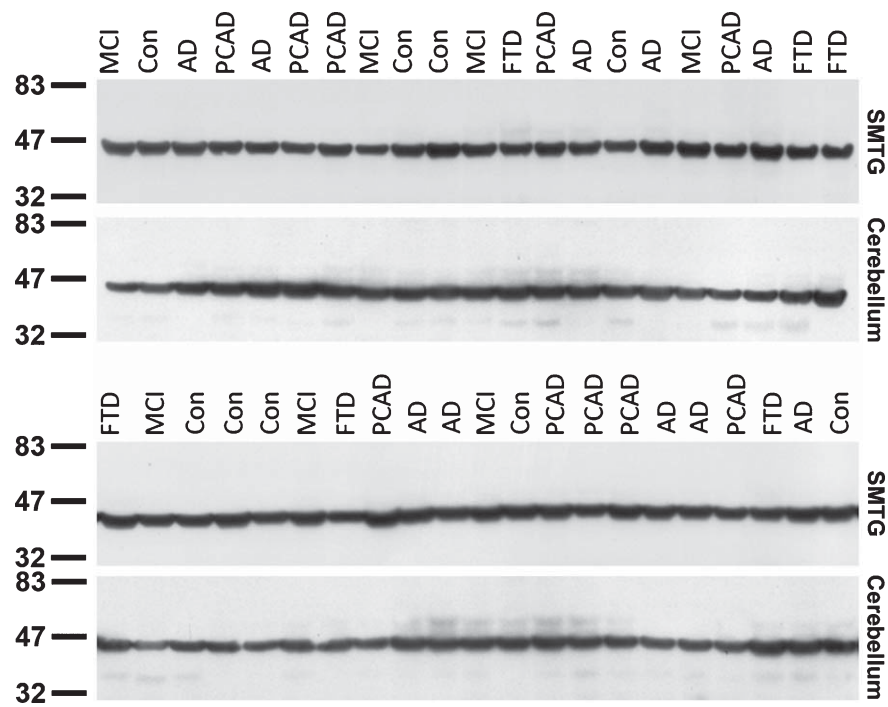
Supplementary Table 1
A β ₄₀ and A β ₄₂ values (uncorrected)

Superior and Middle Temporal Gyri						
	PBS		SDS		FA	
	A β ₄₀	A β ₄₂	A β ₄₀	A β ₄₂	A β ₄₀	A β ₄₂
CON	0.3 $\pm$ 0.2	1.3 $\pm$ 0.3	4.9 $\pm$ 3.1	17.6 $\pm$ 9.1	10.1 $\pm$ 1.6	24.0 $\pm$ 19.2
PCAD	0.3 $\pm$ 0.1	1.6 $\pm$ 0.2	2.6 $\pm$ 0.9	19.8 $\pm$ 6.3	13.0 $\pm$ 1.3	44.0 $\pm$ 20.6
MCI	0.4 $\pm$ 0.1	1.2 $\pm$ 0.5	3.1 $\pm$ 0.6	16.0 $\pm$ 6.1	27.3 $\pm$ 4.1	116 $\pm$ 82.4
AD	0.6 $\pm$ 0.3	2.0 $\pm$ 0.3	111 $\pm$ 52.5*	1032 $\pm$ 131*	310 $\pm$ 108.3*	98.7 $\pm$ 16.5
FTD	0.3 $\pm$ 0.1	1.3 $\pm$ 0.6	3.1 $\pm$ 0.7	0.0 $\pm$ 0.0	18.0 $\pm$ 1.5	18.3 $\pm$ 19.2
Cerebellum						
CON	0.2 $\pm$ 0.0	2.1 $\pm$ 0.2	7.9 $\pm$ 1.6	0.7 $\pm$ 0.7	12.2 $\pm$ 1.3	2.5 $\pm$ 2.5
PCAD	0.2 $\pm$ 0.1	1.6 $\pm$ 0.3	11.4 $\pm$ 0.9	0.2 $\pm$ 0.2	13.4 $\pm$ 1.2	2.2 $\pm$ 1.5
MCI	0.0 $\pm$ 0.0	0.8 $\pm$ 0.3	11.1 $\pm$ 0.9	1.2 $\pm$ 1.0	14.8 $\pm$ 3.0	0.0 $\pm$ 0.0
AD	0.4 $\pm$ 0.2	1.2 $\pm$ 0.3	53.8 $\pm$ 28.8	62.0 $\pm$ 5.3*	544 $\pm$ 328.7	87.9 $\pm$ 37.6*
FTD	0.0 $\pm$ 0.0	1.4 $\pm$ 0.1	7.3 $\pm$ 1.4	0.0 $\pm$ 0.0	9.0 $\pm$ 0.9	0.2 $\pm$ 0.2

Values are given in pmol/g (see main text for a description of the methods). * $p < 0.05$, Dunnett's test (relative to control group). AD, Alzheimer's disease; A β , amyloid- β ; CON, control; FA, formic acid; FTD, frontotemporal dementia; MCI, mild cognitive impairment; PBS, phosphate buffered saline; PCAD; preclinical Alzheimer's disease; SDS, sodium dodecyl sulfate.

¹These authors contributed equally to this work.

*Correspondence to: Dr. M. Paul Murphy, 211 Sanders-Brown Center on Aging, 800 S. Limestone, Lexington, KY 40536-0230, USA. Tel.: +1 859 257 1412; Fax: +1 859 257 9479; E-mail: mpmurp3@email.uky.edu, Dr. Harry LeVine III, 209 Sanders-Brown Center on Aging, 800 S. Limestone, Lexington, KY 40536-0230, USA. Tel.: +1 859 257 1412; Fax: +1 859 323 2866; E-mail: hlevine@email.uky.edu and Dr. Jeffrey N. Keller, Pennington Biomedical Research Center/LSU System, 6400 Perkins Road, Baton Rouge, LA 70808-4124, USA. Tel.: +1 225 763 3190; Fax: +1 225 763 3193; E-mail: jeffrey.keller@pbrc.edu.



Supplementary Figure. 1. As was the case with full length A β PP, levels of β -Actin (Antibody AC15, Sigma-Aldrich; St. Louis, MO) did not vary significantly between cases (*c.f.* corresponding Fig. 2, in main text); this was confirmed by a densitometric analysis (Scion Image; data not shown). All cases in the current cohort are shown from both brain regions. The amount of total protein/lane was identical (SMTG: 90 μ g/lane; cerebellum: 50 μ g/lane).