

Supplementary Materials

Modeling the competition between misfolded A β conformers that produce distinct types of amyloid pathology in Alzheimer's disease

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Table S1. Data for individual animals from PrP.MoA β /PS1 mice injected with seeding homogenates.

First Passage in PrP.MoA β /PS1(Cr) mice					
Animal ID#	Sex	Seed Source	Age Harvested	Pathology Type	Score
0266885-2	M	None	9	None	-
0334921-1	M	None	10	None	-
0334921-2	M	None	10	None	-
0336477-3	F	None	10	None	-
0656952-1	M	None	12	None	-
0850873-1	M	PrP.APPsi (Df)	12	Df	++
0850872-1	F	PrP.APPsi (Df)	12	Df	+++
0884222-1	M	PrP.APPsi (Df)	12	Df	++
0711779-4	F	Tet.MoA β (Df)	9	Df	++
0711783-2	M	Tet.MoA β (Df)	12	Df	+++
0973439-3	F	Tet.MoA β (Df)	10	Df	+++
0973441-1	M	Tet.MoA β (Df)	10	Df	+++
0793910-1	M	PrP.HuA β /PS1 (Cr)	12	M	+
0874270-1	M	PrP.HuA β /PS1 (Cr)	10	Cr	+
0879086-1	M	PrP.HuA β /PS1 (Cr)	12	Cr	+
0879086-2	M	PrP.HuA β /PS1 (Cr)	12	Cr	+
0879087-2	F	PrP.HuA β /PS1 (Cr)	12	Cr	+
0720151-2	F	PrP.MoA β /PS1 (Cr)	12	Cr	+
0706695-3	M	PrP.MoA β /PS1 (Cr)	9	Cr	+
0864798-1	M	PrP.MoA β /PS1 (Cr)	12	Cr	+
1025434-1	M	PrP.MoA β /PS1 (Cr)	12	Cr	-
1025434-2	M	PrP.MoA β /PS1 (Cr)	12	Cr	+
1025434-3	M	PrP.MoA β /PS1 (Cr)	12	Cr	+

Table S1 (continued). Data for individual animals from PrP.HuA β /PS1 mice injected with seeding homogenates.

First Passage in PrP.HuA β /PS1(Cr) mice					
Animal ID#	Sex	Seed Source	Age Harvested	Pathology Type	Score
1004005-1	F	None	5	Cr	+
1004005-2	F	None	5	Cr	+
0574005-2	M	None	6	Cr	+
0862093-3	M	PrP.APPsi (Df)	6	Cr	+
0862093-4	M	PrP.APPsi (Df)	6	Cr	++
0862082-1	M	PrP.APPsi (Df)	6	Cr	+
0862087-1	F	PrP.APPsi (Df)	6	Cr	++
0871377-1	M	Tet.MoA β (Df)	6	M	+
0871377-4	M	Tet.MoA β (Df)	6	M	++
0871376-1	F	Tet.MoA β (Df)	6	M	++
0879926-3	M	Tet.MoA β (Df)	6	M	++
0879926-4	M	Tet.MoA β (Df)	6	M	++
0793904-1	M	PrP.HuA β /PS1 (Cr)	6	Cr	+
0793904-2	M	PrP.HuA β /PS1 (Cr)	6	Cr	+
0793904-4	M	PrP.HuA β /PS1 (Cr)	6	Cr	+
0808994-1	M	PrP.HuA β /PS1 (Cr)	6	Cr	+
0808994-3	M	PrP.HuA β /PS1 (Cr)	6	Cr	+
0808994-4	M	PrP.HuA β /PS1 (Cr)	6	Cr	++
0808993-3	F	PrP.HuA β /PS1 (Cr)	6	Cr	+
0808996-1	M	PrP.HuA β /PS1 (Cr)	6	Cr	+
0808996-2	M	PrP.HuA β /PS1 (Cr)	6	Cr	+
0879931-1	M	PrP.MoA β /PS1 (Cr)	6	Cr	+
0879931-2	M	PrP.MoA β /PS1 (Cr)	6	Cr	+
0879931-4	M	PrP.MoA β /PS1 (Cr)	6	Cr	+
0879931-5	M	PrP.MoA β /PS1 (Cr)	6	Cr	+
0879930-1	F	PrP.MoA β /PS1 (Cr)	6	Cr	+
0896402-1	M	PrP.MoA β /PS1 (Cr)	6	Cr	+
0896402-2	M	PrP.MoA β /PS1 (Cr)	6	Cr	+

Table S2. Data for individual animals from serial passaging experiments.

Animal ID #	Sex	Passage History (host strain)	Age Harvested	Last Recipient Pathology Type at Harvest	Pathology Burden Score
0898272-1	F	Tet.MoA β to PrP.APPsi to PrPHuA β /PS1 (Df to Df to Cr)	6	M	++
0898279-2	M		6	M	++
0898279-4	M		6	M	++
0898276-1	F		6	M	++
0905961-3	F		6	M	++
0905960-2	F		6	M	++
0898273_1	F	Tet.MoA β to PrP.APPsi to PrP.APPsi (Df to Df to Df)	12	Df	+++
0898274_1	M		12	Df	+++
0951046_1	F		12	Df	+++
1052846-1	M	Tet.MoA β to PrP.APPsi to PrP.MoA β /PS1 (Df to Df to Cr)	12	Df	+++
1052845-1	F		12	Df	+++
1052847-1	F		12	Df	+++
1052848-1	M		12	Df	+++
1049839-4	M		12	Df	+++
0896400-1	M	Tet.MoA β to PrP.MoA β /PS1 to PrP.HuA β /PS1 (Df to Cr to Cr)	6	M	++
0896400-3	M		6	M	++
0896401-2	F		6	M	+
0896401-3	F		6	M	++
0904807-3	F		6	M	++
0970245_1	F	Tet.MoA β to PrP.MoA β /PS1 to APPsi (Df to Cr to Df)	11	Df	+++
0970245_2	F		11	Df	+++
0970245_3	F		11	Df	+++
0979027_1	M		11	Df	+++
0979027_2	M		11	Df	+++
0970245_1	F		11	Df	+++
0953016-1	F	Tet.MoA β to PrP.MoA β /PS1 to PrP.MoA β /PS1 (Df to Cr to Cr)	12	Df	+++
0953016-2	F		12	Df	+++
0950580-1	F		12	Df	+++
0904803-3	M	PrP.HuA β /PS1 to PrP.APPsi to PrP.HuA β /PS1 (Cr to Df to Cr)	6	Cr	+
0904806-3	F		6	Cr	+
1015397-1	M		5	Cr	++
1015397-2	M		5	Cr	+
1015397-3	M		5	Cr	+
1015396-1	F		5	Cr	+
0914085_1	M	PrP.HuA β /PS1 to PrP.APPsi to PrP.APPsi (Cr to Df to Df)	12	Df	+++
0914085_2	M		12	Df	+++
0914085_3	M		12	Df	+++
0914086_1	F		12	Df	+++
0914086_2	F		12	Df	++
0922186-2	M	PrP.MoA β /PS1 to PrP.APPsi to PrP.HuA β /PS1 (Cr to Df to Cr)	6	Cr	+
0922185-1	F		6	Cr	++
0904809-3	M		6	M	+
0904809-4	M		6	M	+
0904808-2	F		6	Cr	+
0904808-3	F		6	Cr	+
0901683_1	F	PrP.MoA β /PS1 to PrP.APPsi to PrP.APPsi (Cr to Df to Df)	12	Df	+++
0901683_2	F		12	Df	+++
0957340_1	F		12	Df	+++

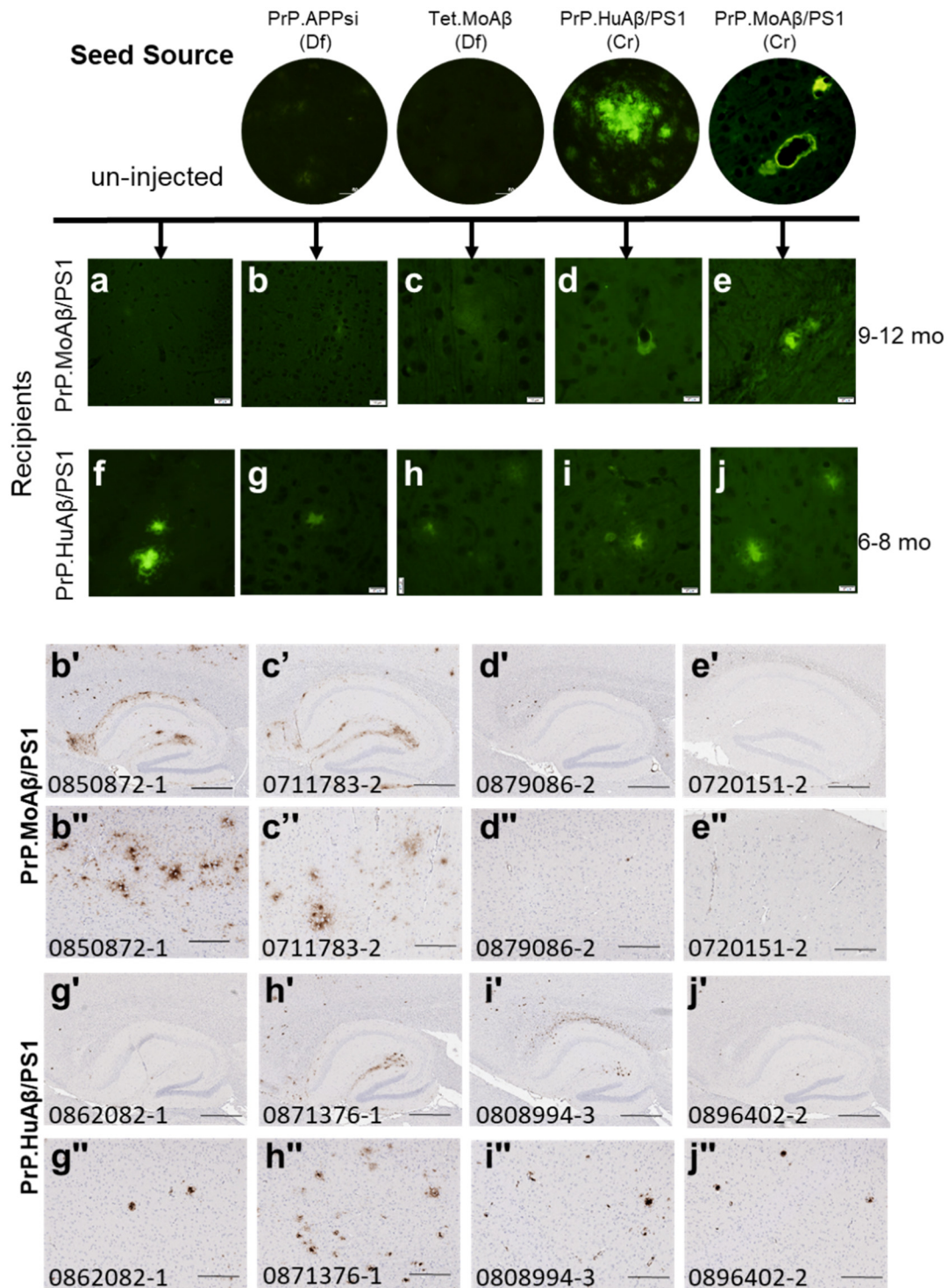


Figure S1. Representative images from tissue sections stained with Thio-S and A β antibodies for animals displayed in Figure 1. The layout of the figure is identical to that of Fig. 1 in the main text. The upper panels show high power images of A β deposit morphology from Thio-S silver staining in the brain of the seed source animal. The square images are from uninjected mice (a) and the brains of the recipients (b-j). All of these images are from cortex. b'-j'') Representative images of hippocampus and cortex of recipient mice. The labels and scale bars are the same as described in the legend of Figure 1 of the main text.

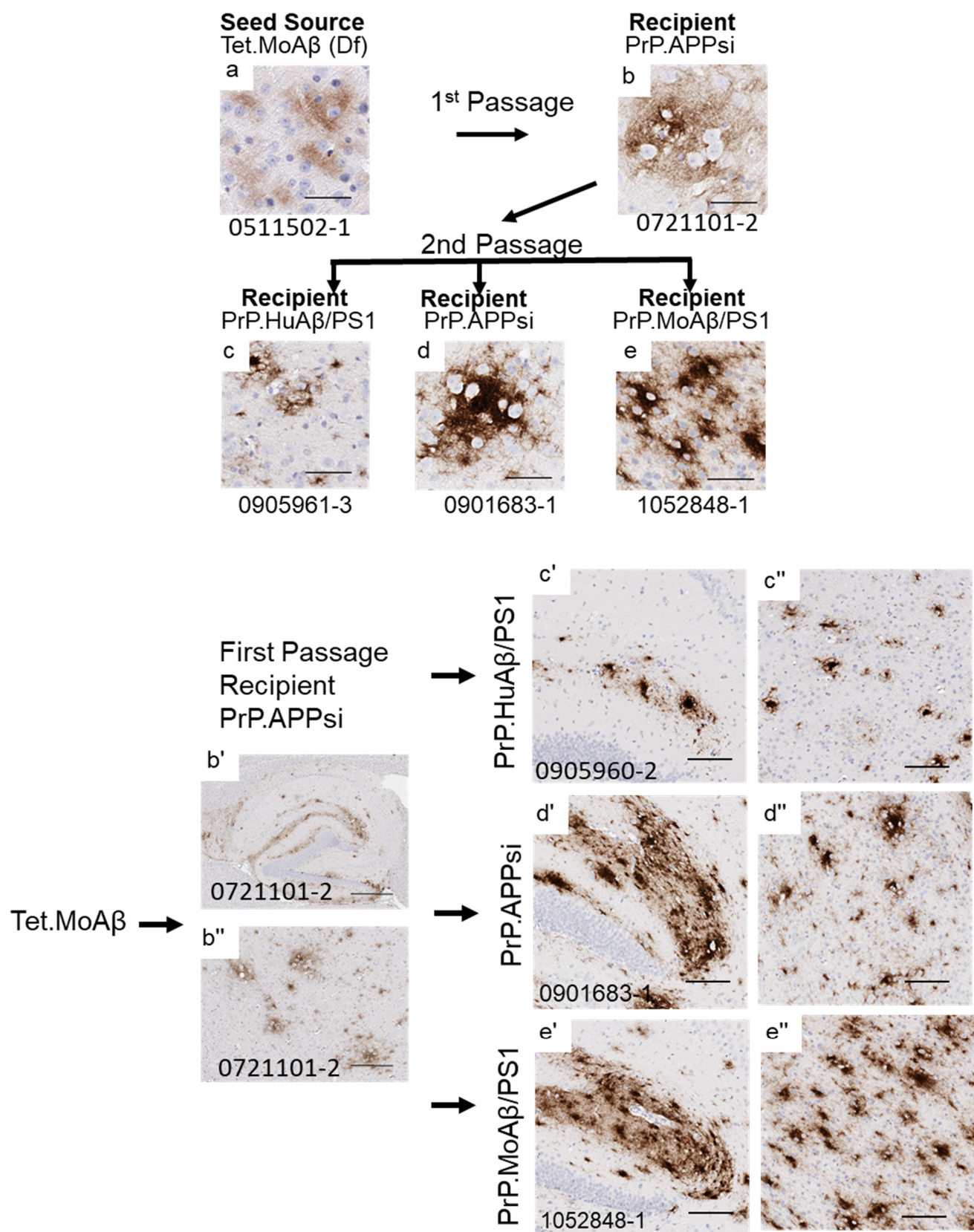


Figure S2. Representative images from tissue sections stained with Aβ antibodies for animals displayed in Figure 2. The layout of the figure, including labels and scale bars, is identical to the description of in the legend of Fig. 2 in the main text.

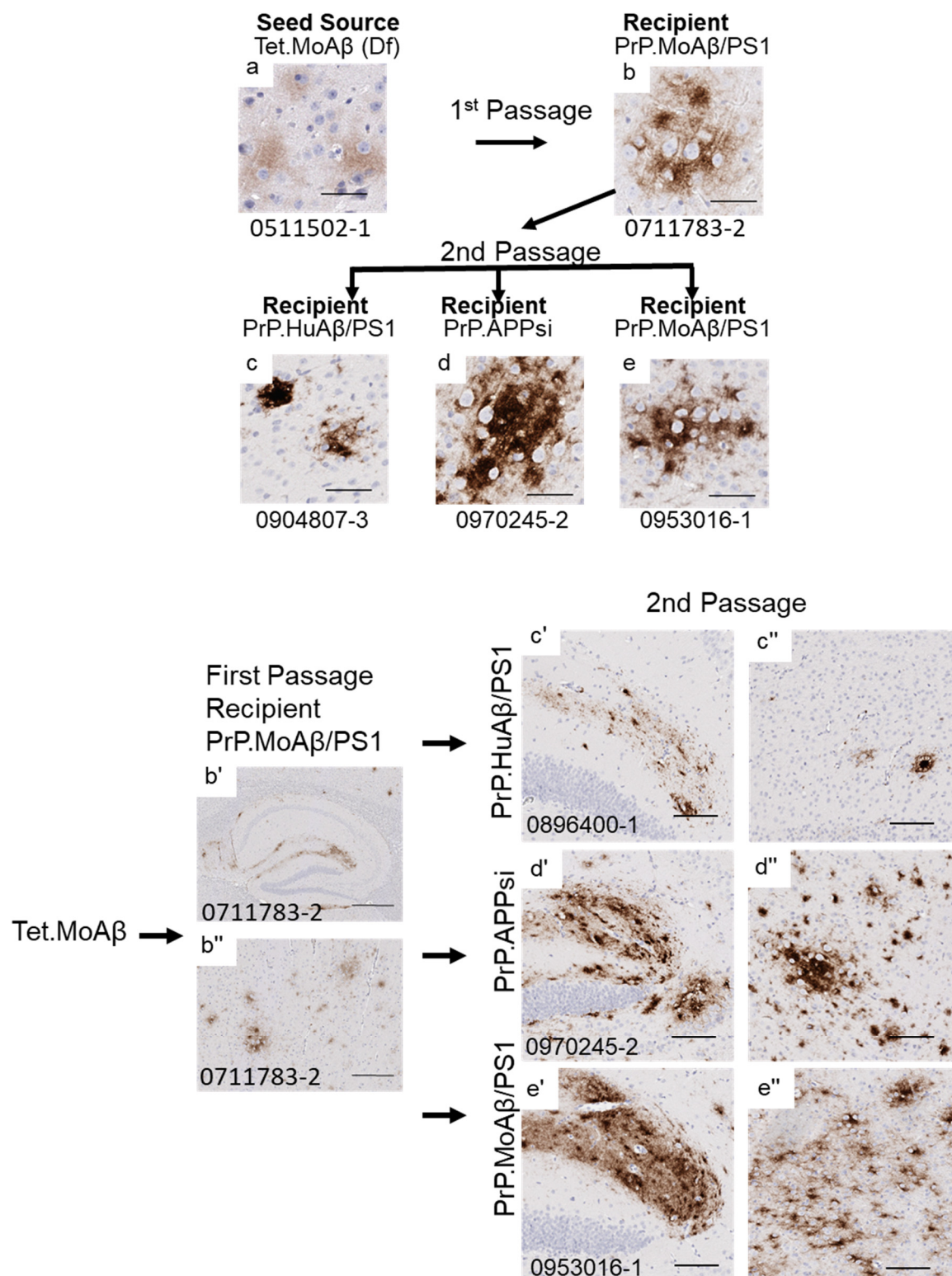


Figure S3. Representative images from tissue sections stained with A β antibodies for animals displayed in Figure 3. The layout of the figure, including labels and scale bars, is identical to the description of in the legend of Fig. 3 in the main text.

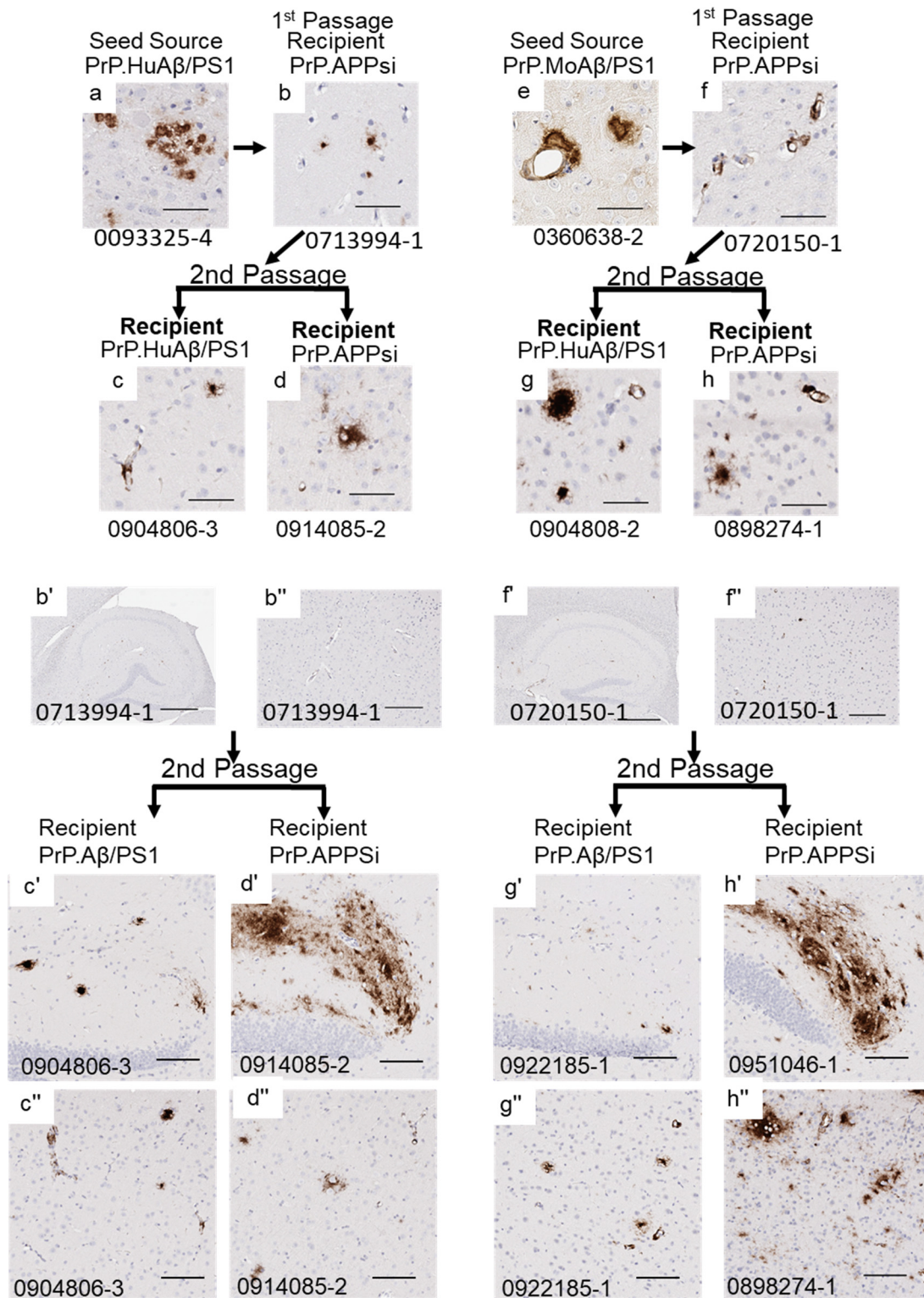


Figure S4. Representative images from tissue sections stained with Aβ antibodies for animals displayed in Figure 4. The layout of the figure, including labels and scale bars, is identical to the description of in the legend of Fig. 4 in the main text.