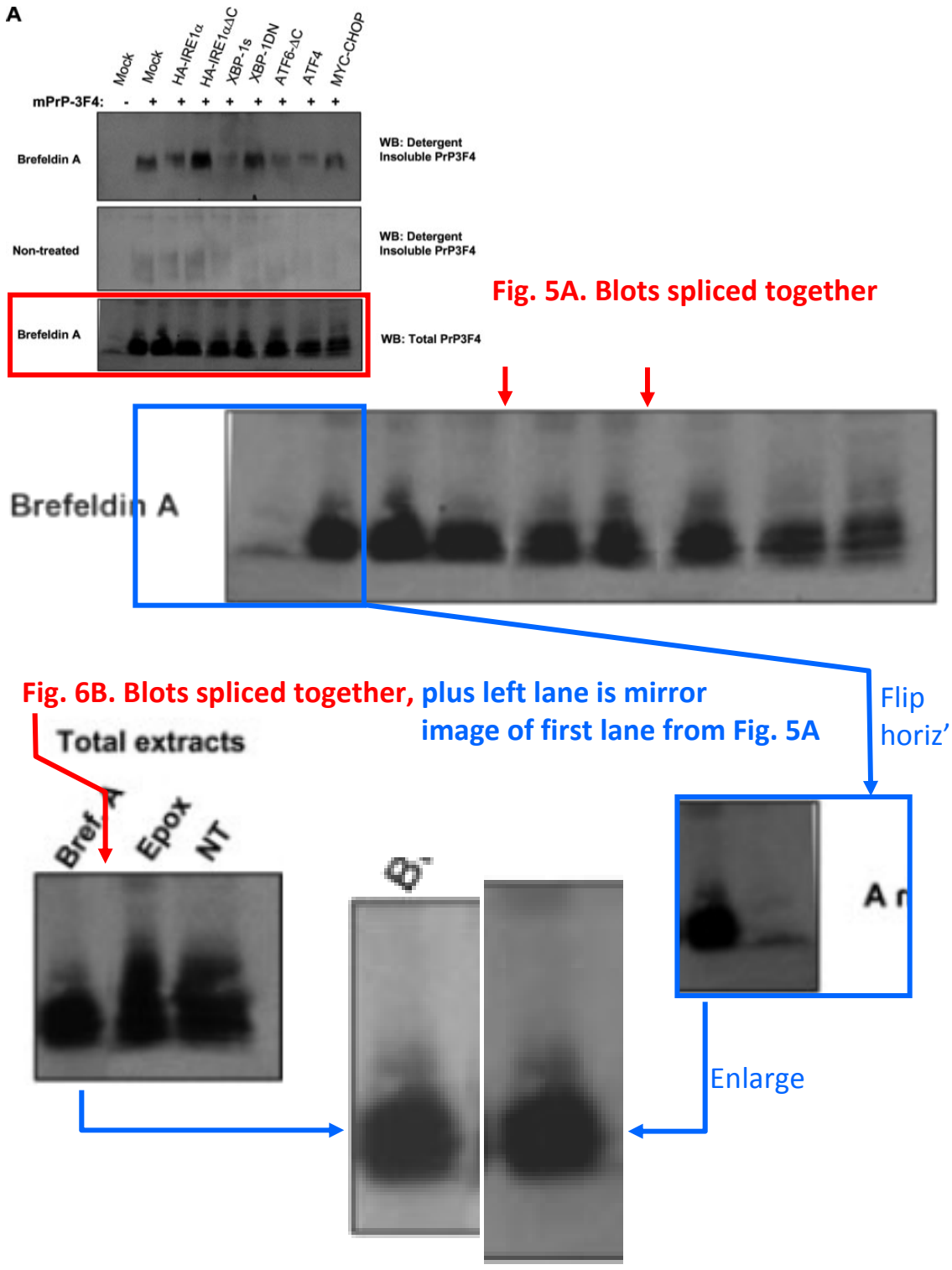
J Biol. Chem. 2007;282;12725-33; PMID17329244



Mol Psychiatr 2011, Advance ePub doi:10.1038/mp.2011.120

Fig. 2B. Can you spot the splicing seam?

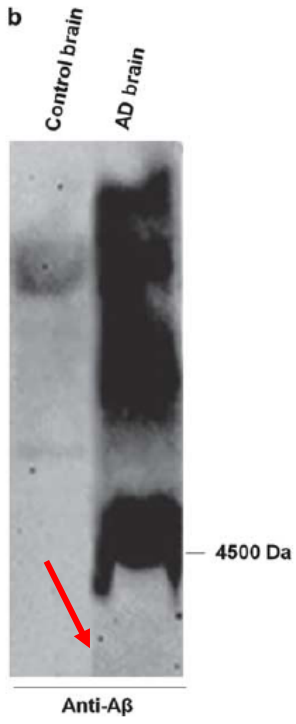


Fig. 3A. Alzheimer's brain at 450 days

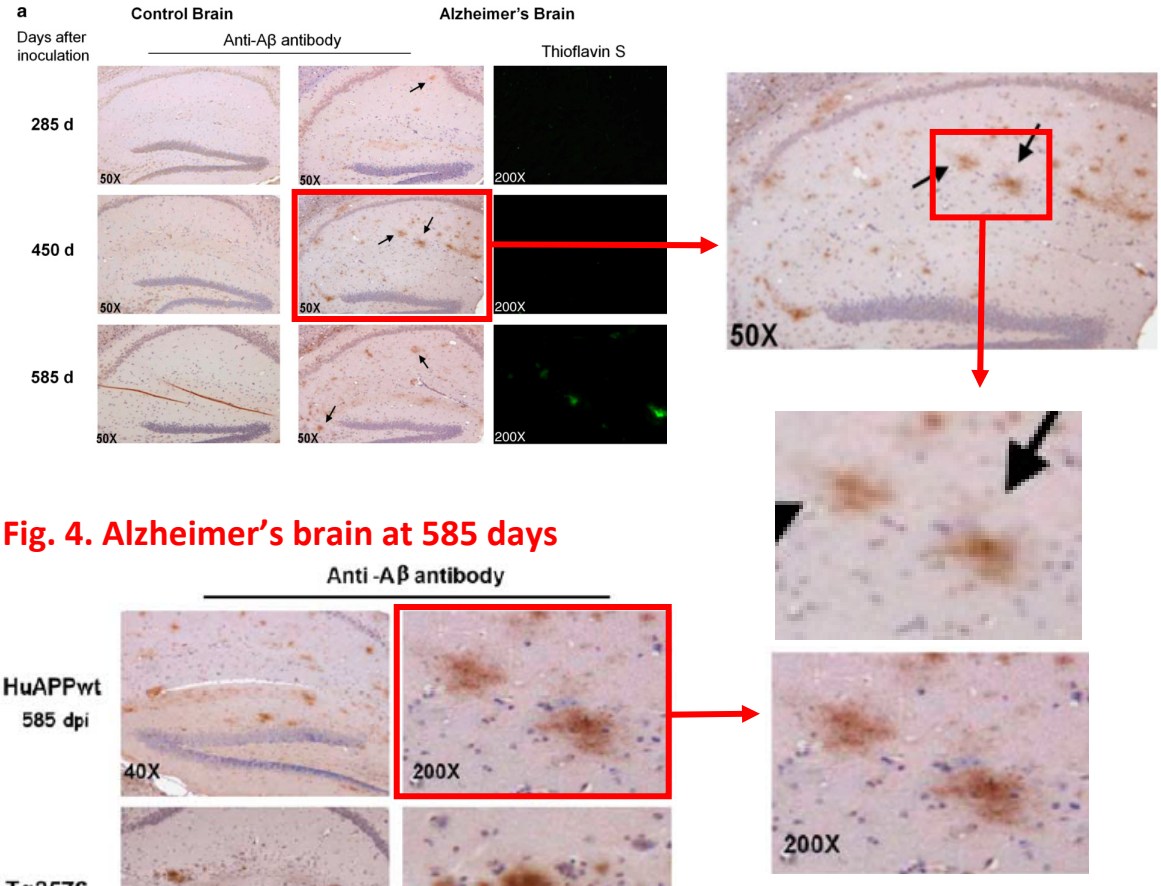
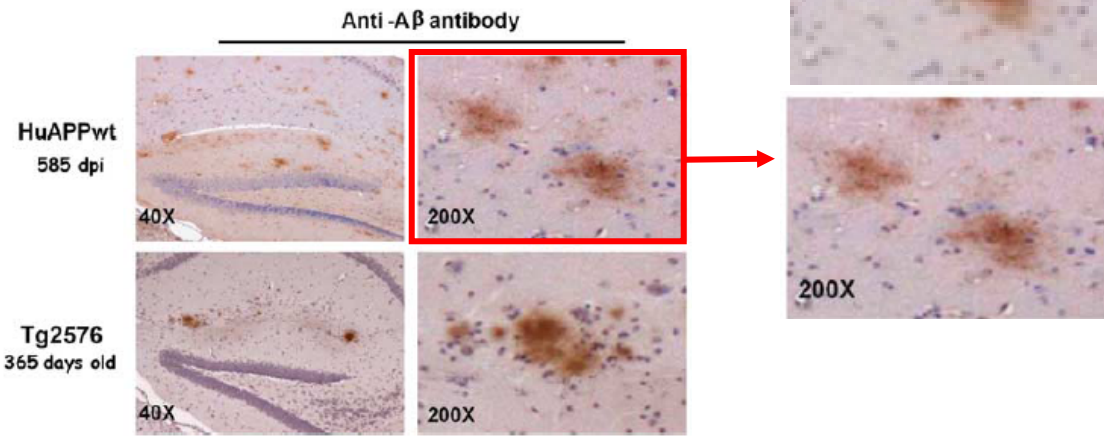


Fig. 4. Alzheimer's brain at 585 days



PLoS Pathog 5(5): e1000421. doi:10.1371/journal.ppat.1000421

Figure 1A. Same image used for 2 panels, with horizontal stretching

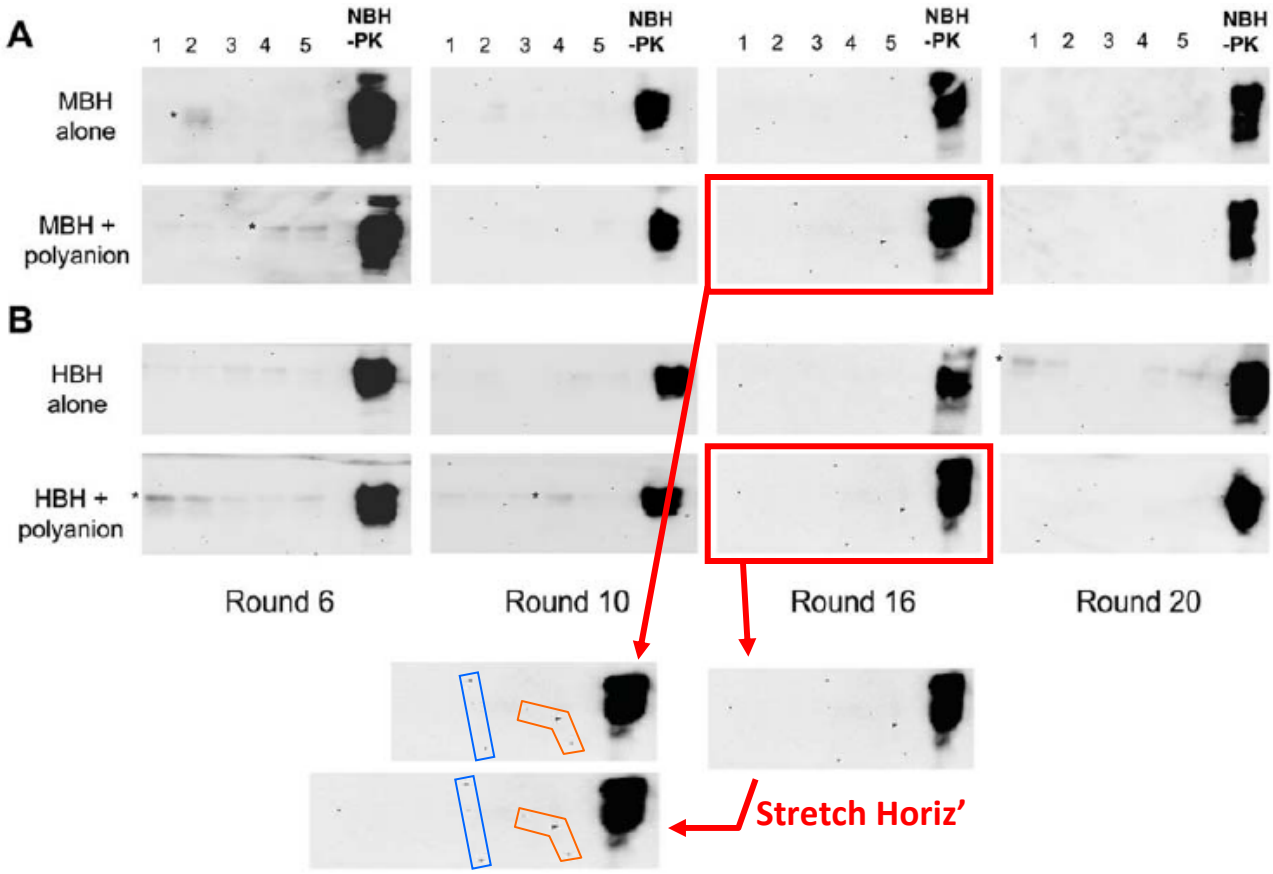


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Fig. 2. Splicing of lanes together visible under enhanced contrast

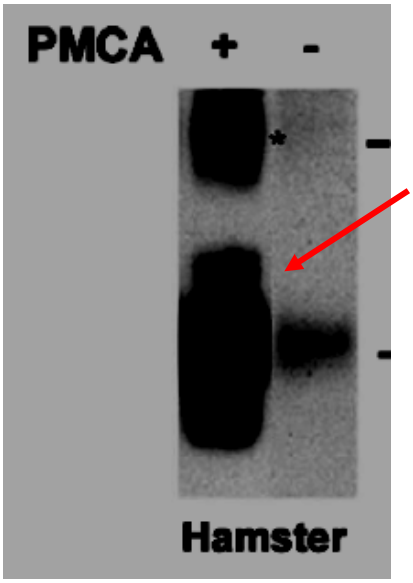
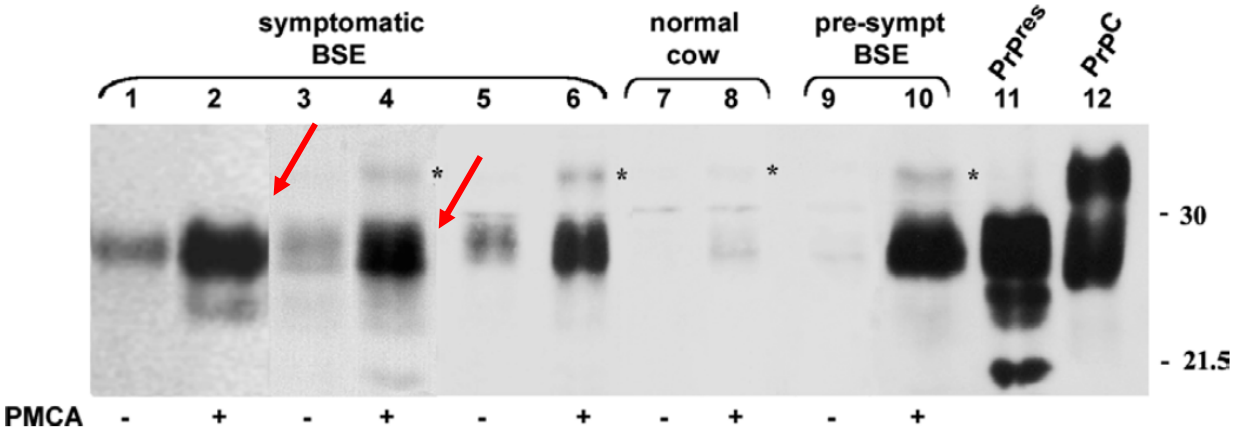
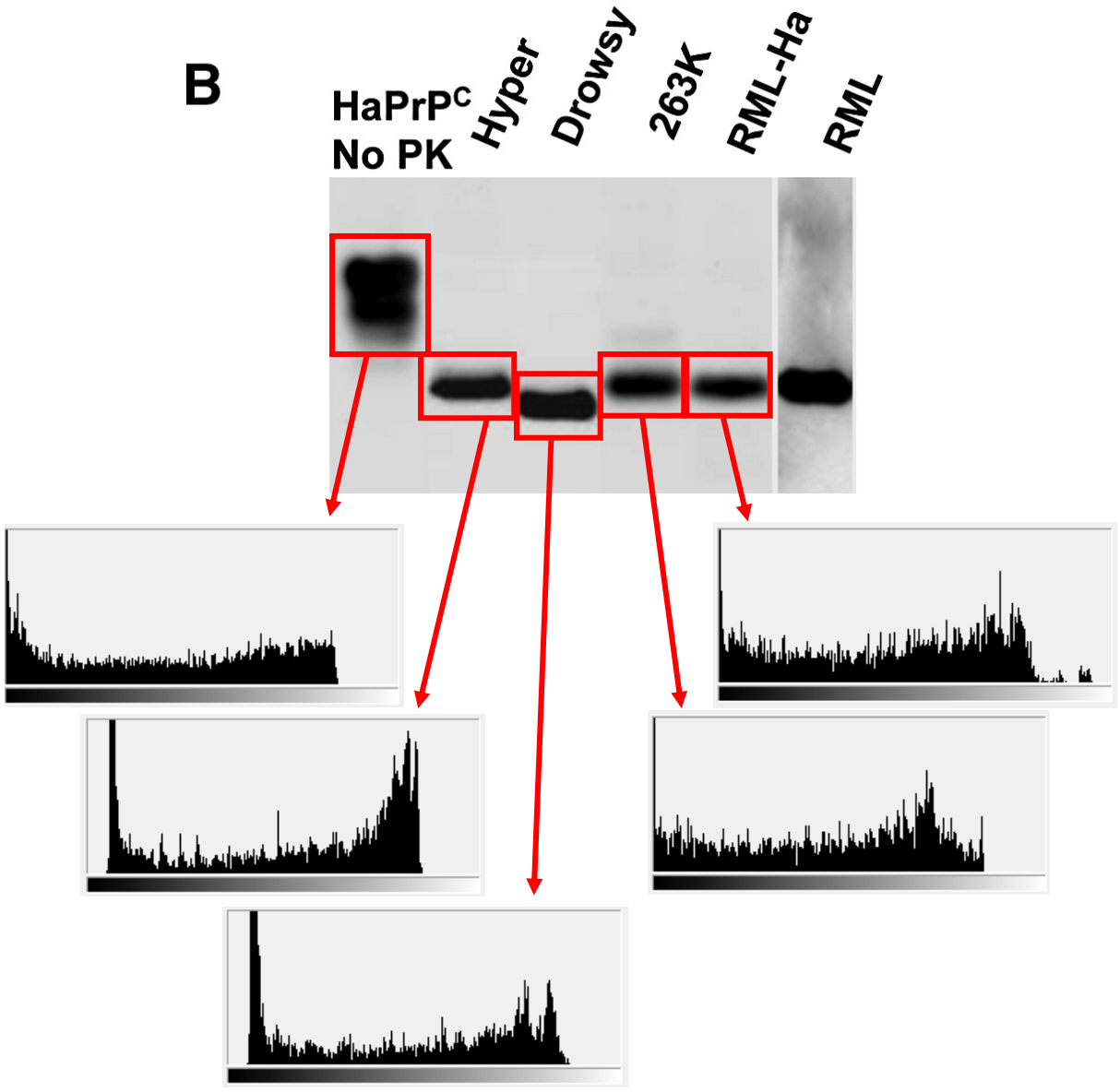


Fig. 4. More obvious splicing



Cell 2008;134;757-768; PMID18775309

Fig. 4B. Although bands in all lanes are "saturated", lanes 2 & 3 are not as black as the rest, as shown by histograms in Adobe Photoshop



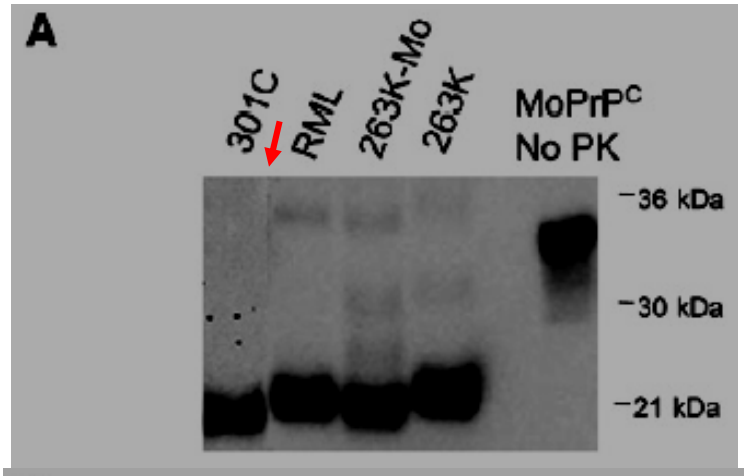
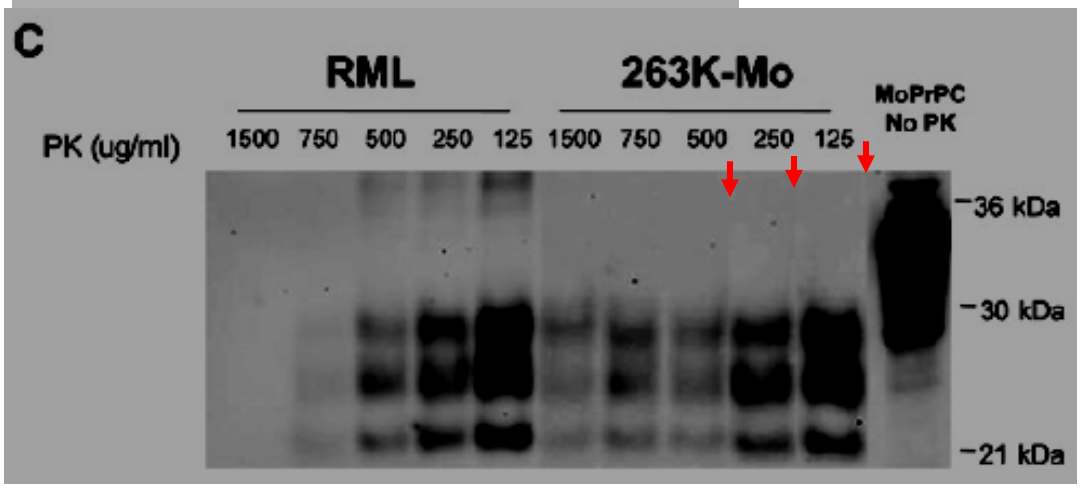


Fig. 7A & C.
More splicing



FEBS Letters 588 (2014) 795–800

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Peripherally administrated prions reach the brain at sub-infectious quantities in experimental hamsters

Baian Chen [a,b], Claudio Soto [a], Rodrigo Morales [a,*]

Methods text.

Note different treatment of samples for either basic western blot detection or PMCA (cyclic amplification). For western blot, homogenates were briefly centrifuged and supernatants then used for the blot. For PMCA, an intricate extraction process was used, involving addition of detergent, ultracentrifugation, another ultracentrifugation, and suspending pellets in buffer containing normal brain homogenate.

2.2. Preparation of tissue homogenates

Brain and spleen homogenates were prepared at 10% in phosphate saline buffer (PBS, MP Biomedicals, cat. No. 1860454) with a protease inhibitor cocktail (Roche Diagnostics, cat. No. 11 697 498 001). After a brief centrifugation to eliminate debris (805 g for 45 s in a Beckman-Coulter Allegra 25R centrifuge), supernatants were used for Western blot (WB) analysis. To concentrate PrP^{Sc} and remove tissue components that may interfere with PMCA, 500 μL of sample were mixed with a sarkosyl (Fisher Bioreagents, cat. No. BP234) solution prepared in PBS (final concentration, 10%) and centrifuged at 100000×g for 1 h at 4 °C [25]. Supernatants were discarded and PBS was added to the pellets (without resuspension) in order to dilute out traces of detergent. Samples were centrifuged again at 100,000 g for 30 min at 4 °C. Final pellets were resuspended in 100 μL of normal hamster brain homogenate prepared at 10% in Conversion Buffer (PMCA substrate, 150 mM NaCl and 1% Triton X-100 in PBS) [8,26] and submitted to PMCA.

Figures 1 and 2. Note similar appearance of two panels (highlighted in red). See next page for detail.

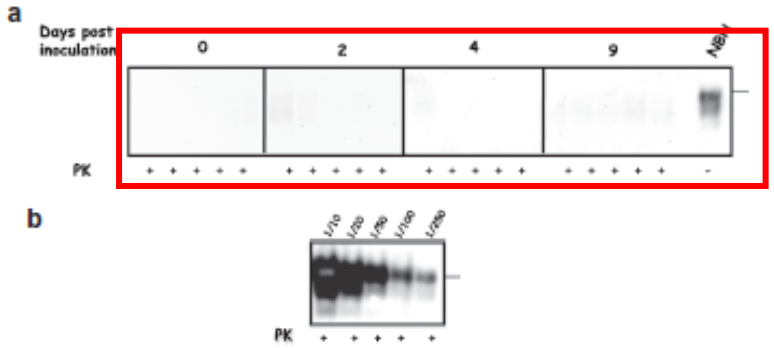


Fig. 1. Absence of detectable amounts of PrP^{27-40} in brain homogenates of 263K injected hamsters shortly after inoculation. (a) Brains from hamsters sacrificed at 0, 2, 4 and 9 days after i.p. infection with 263K prions were homogenized and analyzed by PK treatment and WB as explained in methods. All samples were negative for PrP^{27-40}. (b) Brain serial dilutions from a symptomatic 263K i.p. infected hamster analyzed in the same way as in (a). NBH correspond to brain homogenates from healthy hamsters (no PK treated) used as a control of electrophoretic mobility. Horizontal lines at the right of each gel represent the position of a 36KDa (a) or 26KDa (b) molecular weight standard. Solid vertical lines depict separation of different gels. Numbers at top of panel (b) represent dilutions of brain homogenate.

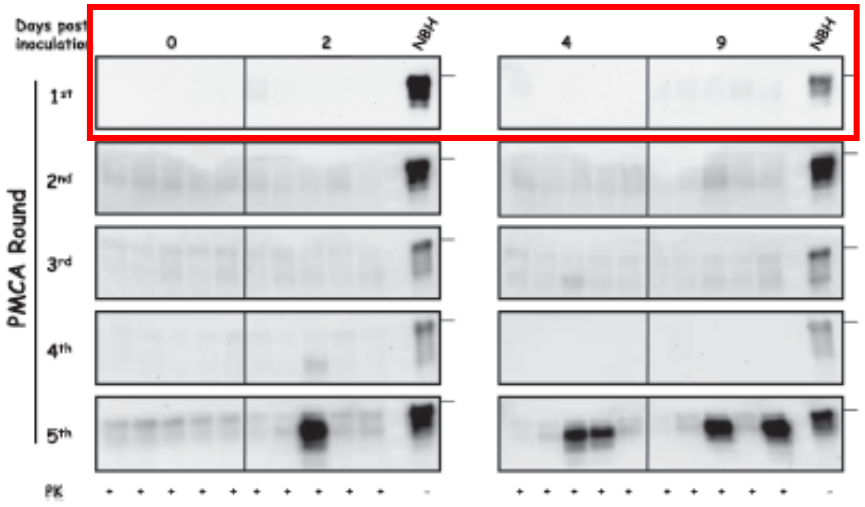


Fig. 2. Detection of PrP^{sc} by PMCA in brains of 263K infected hamsters sacrificed few days after inoculation. Brain extracts were precipitated by centrifugation in the presence of sarkosyl, pellet resuspended in normal brain homogenates from healthy hamsters and submitted to serial PMCA. After PMCA, samples were PK treated and analyzed as described in methods. NBH correspond to brain homogenates from healthy hamsters (no PK treated) used as a control of electrophoretic mobility. Horizontal lines at the right of each gel represent the position of a 36KDa molecular weight marker. Solid vertical lines between different gels indicate blot splicing.

Panels from Figures 1 & 2, with contrast enhanced to show features….

Fig. 1

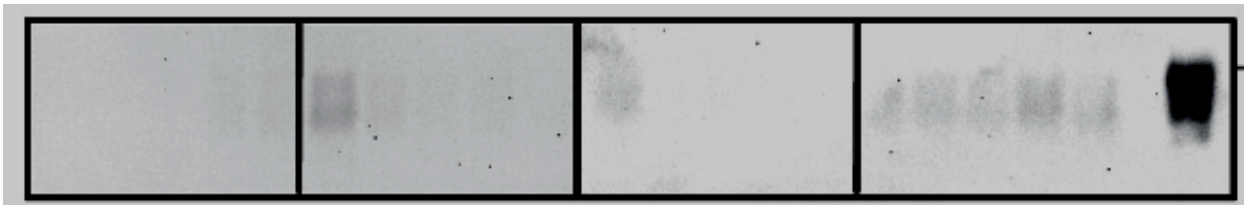
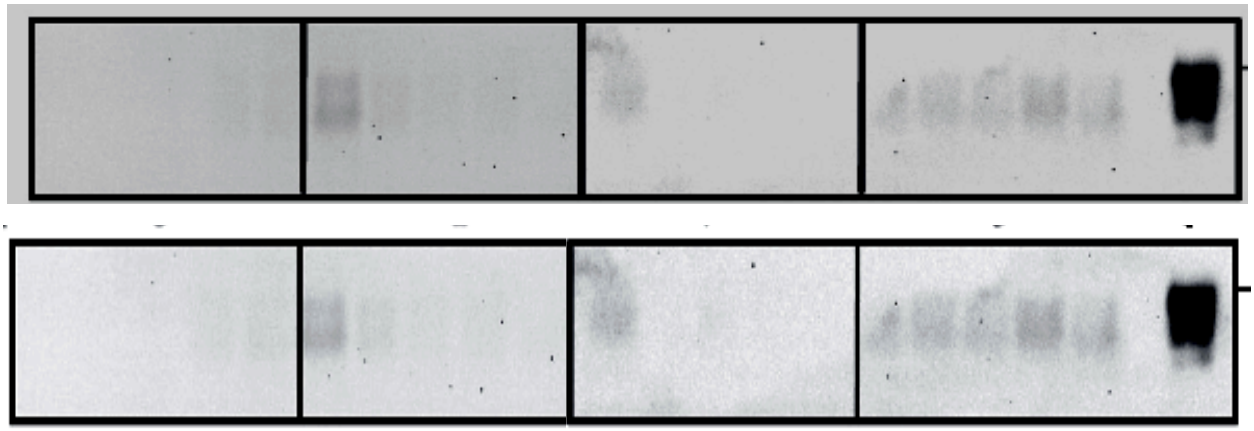


Fig. 2

Keep Fig. 1 the same

Take Fig. 2, crop out the middle bit, and stretch vertically



Conclusion – first round PMCA and western blot are the same gel, despite completely different preparative methods claimed.