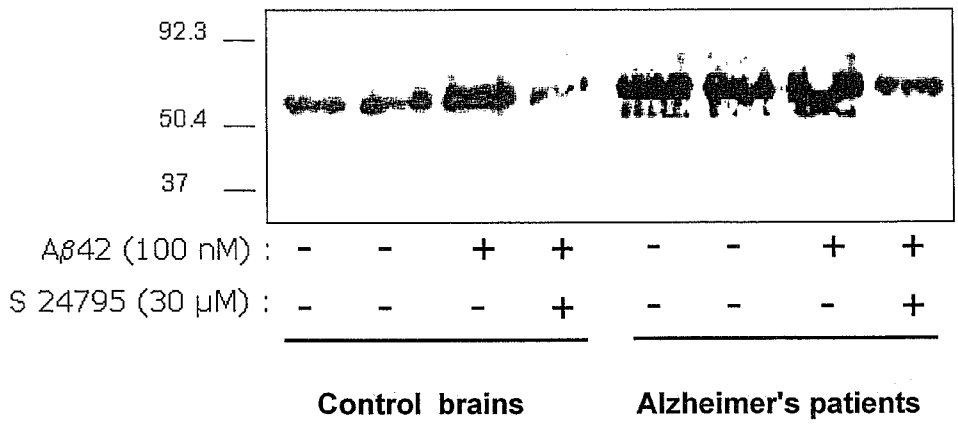


Figure 1: Inhibition, by S 24795, of $A\beta_{42}$-α7 nAChR complexes obtained post-mortem from frontal cortex synaptosomes of Alzheimer's disease patients or control subjects. Incubation in the medium (Krebs-Ringer) on its own or in the presence of S 24795 (30µM) for 10 minutes, followed by incubation in the presence of $A\beta_{42}$ peptide for 30 minutes. Immunoprecipitation using anti-$A\beta_{42}$ antibodies followed by Western blot using anti-α7 antibodies. This data is obtained from five pairs of control subjects or Alzheimer's disease patients, matched by age.

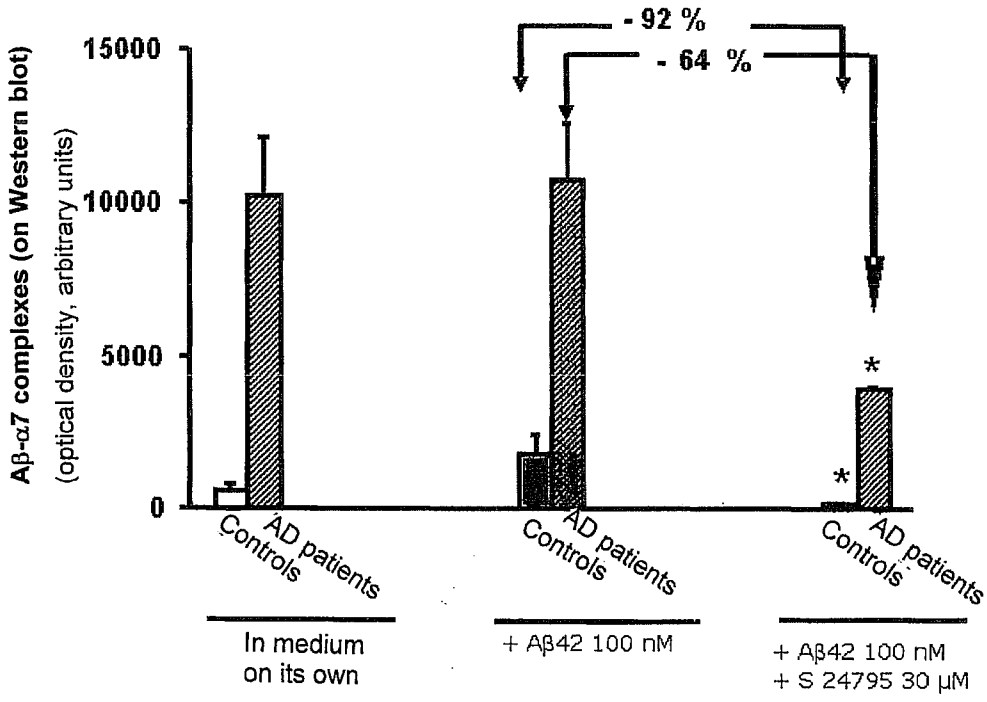


Figure 2: Quantification of α7 nAChR receptors associated with $A\beta_{42}$ in human frontal cortex synaptosomes obtained post-mortem from Alzheimer's disease patients and control subjects and incubated with S 24795 (30µM) - or not - and then with the peptide $A\beta_{42}$ (100nM). * : $p<0.01$ for controls and Alzheimer's disease patients, Newman-Keuls test for multiple comparisons.

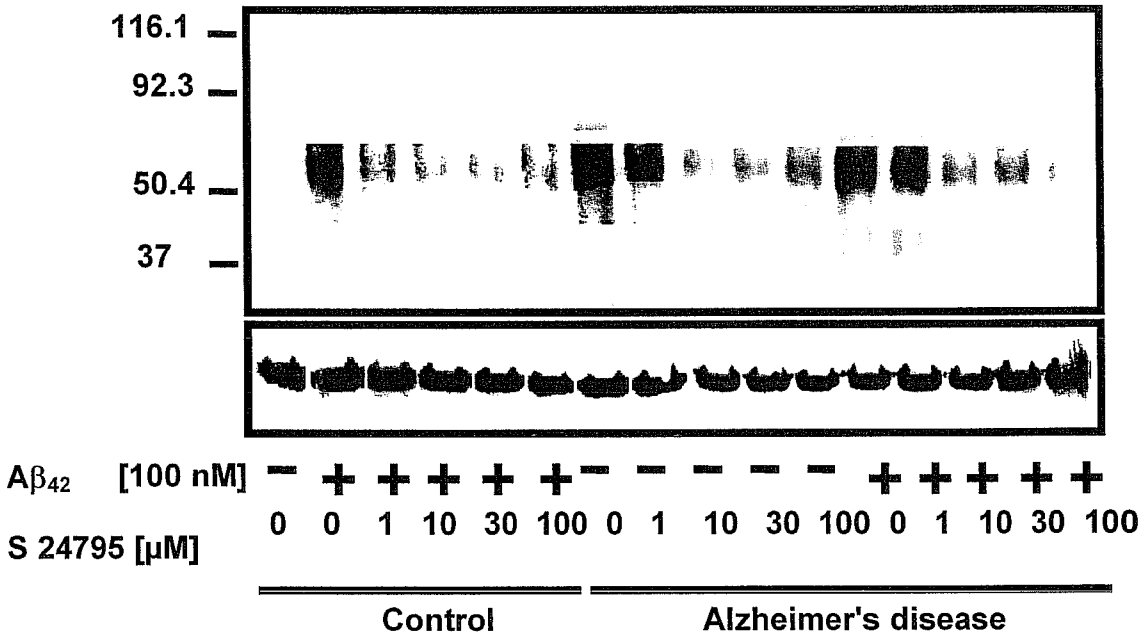


Figure 3: Western blot illustrating the dissociation, caused by S 24795, of $A\beta_{42}$-α7 nAChR complexes obtained post-mortem from frontal cortex synaptosomes of Alzheimer's disease patients or control subjects. The $A\beta_{42}$-α7 nAChR complexes are incubated in the medium (Krebs-Ringer) on its own or in the presence of S 24795 (1, 10, 30 or 100µM) for 10 minutes and then with or without the peptide $A\beta_{42}$ (100nM).

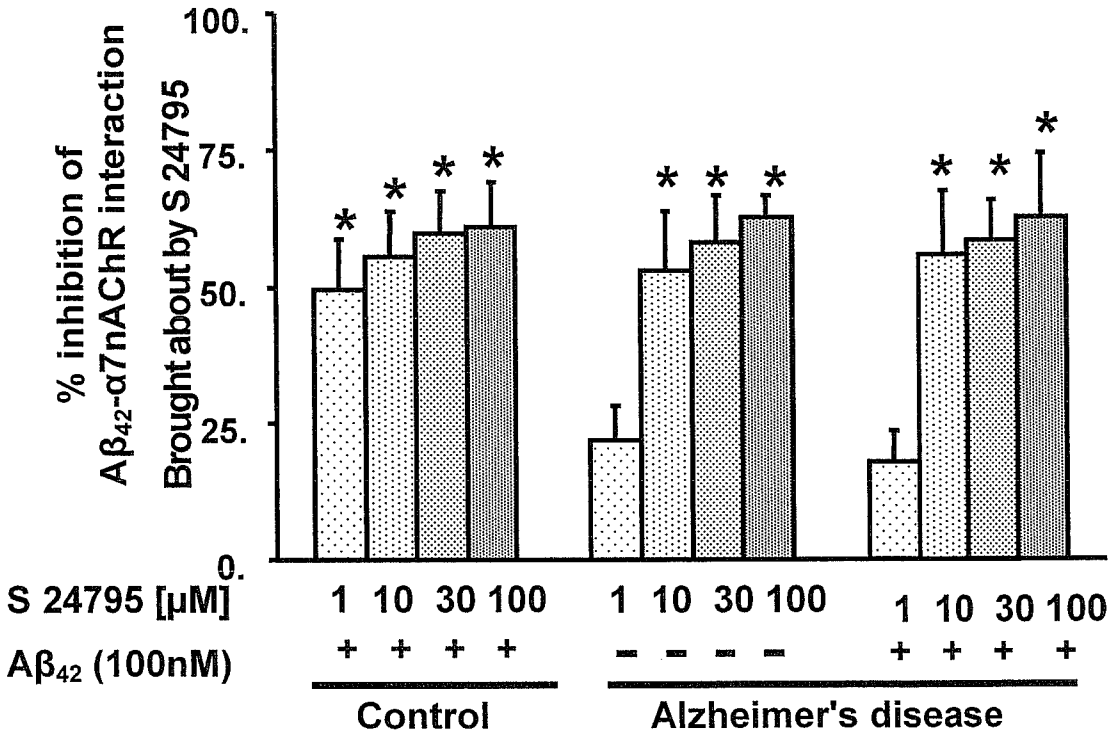


Figure 4: Quantification of α7 nAChR receptors associated with $A\beta_{42}$ in human frontal cortex synaptosomes obtained post-mortem from Alzheimer's disease patients and control subjects and incubated with S 24795 (from 1 to 100µM) and then with or without $A\beta_{42}$ peptides (100nM). * : $p<0.01$ for controls and Alzheimer's disease patients, two-factor ANOVA followed by a Newman-Keuls test for multiple comparisons. This data is obtained from six control subjects and six Alzheimer's disease patients, matched by age.

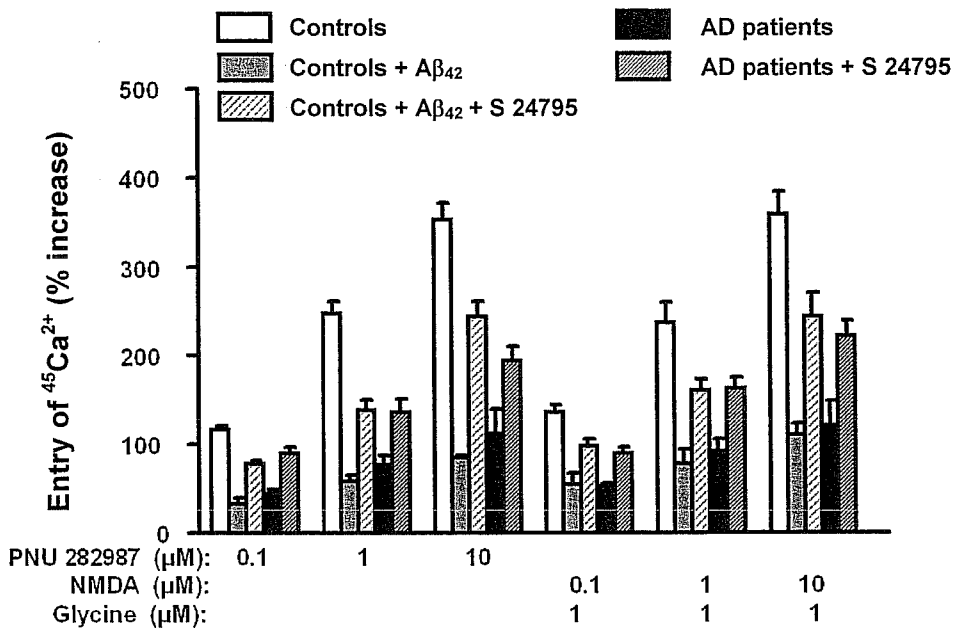


Figure 5: Quantification of the entry of $^{45}Ca^{2+}$ into human frontal cortex synaptosomes obtained post-mortem from Alzheimer's disease patients and from control subjects and treated with S 24795. The control brain slices are incubated in the presence of $A\beta_{42}$ (1μM) - or not - prior to the treatment with S 24795 (10μM). Calcium entry is brought about either by α7 agonist (PNU282987) or by NMDA added to glycine. This data is obtained from five Alzheimer's disease patients and five control subjects, matched by age.