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Direct interaction between Selenoprotein R and A β ₄₂

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Abstract Amyloid- β (A β) peptides have taken a central role in AD research, the aggregation of A β peptide is involved in the progression of Alzheimer's disease (AD). The 35th amino acid was methionine (Met) in A β peptides and its redox state is critical in determining the biological activity of A β . It has been suggested that oxidation of Met³⁵ (Met³⁵O) plays a key role in the formation of paranuclei and in the control of oligomerization pathway choice. As an antioxidative selenoenzyme, Selenoprotein R (SelR) plays important roles in reducing the R-form of MetO to Met to maintain intracellular redox balance. However, the relationship between SelR and A β was little investigated.

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