

Structure, Function and Evolution of the Serum Pentraxins

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Wide-ranging studies on the serum pentraxins C-reactive protein and serum amyloid P component are aimed at the investigation of the structural, functional and evolutionary relationships, and of the humoral and cellular recognition properties, of the pentraxins from species ranging from invertebrate to man. Recognition properties of the pentraxins, homologues of which have been found in mammals, fish, amphibians, and invertebrates, include cell wall phospholipids and fungal and bacterial polysaccharides. In the absence of highly developed adaptive immunity, a diverse array of humoral components, such as the pentraxins, provides an essential and effective strategy for recognising and destroying disease-causing pathogens.

The structures of pentraxins from man [1], rat, *Mustelis canis* and *L. polyphemus* [2,3,4] reveal variable aggregation of the conserved protomer fold, details of novel binding properties and insights in to the relationships between structural, functional and sequence homology.

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