

During obtaining their blood meal, bloodsucking arthropods salivate into their host. Bloodsucking arthropods' saliva contains wide array of bioactive macromolecules. Host organism develops antibody response against many of these molecules. Due to interspecies variability in salivary protein composition, detection of antibody response may serve as a marker of the exposure to individual species of bloodsucking arthropods. Host antibody response is mostly elicited by proteins or glycoproteins. Glycoproteins contain one or more oligosaccharide chains attached to the protein. Glycoprotein's antigenicity could be caused by either both parts, or by only the protein, or the sugar part. This fact has to be taken into consideration for choice of the expression system for recombinant glycoprotein synthesis. This work summarizes current knowledge about structure, function and features of salivary glycoproteins in various species of bloodsucking arthropods.