

Carbohydrate microarrays and glyconanoparticles for the analysis of human and parasite glycobiology

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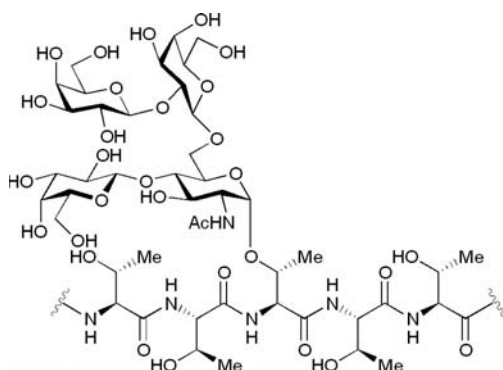
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The sialic acids are a family of carbohydrates that are intimately associated with cellular recognition events. Using a combination of glycoarray and glyconanoparticle approaches, we have been investigating sialic acid recognition in the context of the human immune system and infection by the parasitic protozoan *Trypanosoma cruzi*. On one hand, glycoarray approaches with soluble, recombinant proteins have allowed us to explore similarities and differences in the carbohydrate-binding specificity of human and murine siglecs. On another, glyconanoparticle studies have enabled us ask questions about the structure and sialylation of parasite mucins. The combination of this information is now enabling us to begin to explore host recognition of parasite glycans through cell-based assays.

Trypanosoma cruzi Y strain mucin glycoprotein fragment



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Notes and References

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