Protein Carriers for Vaccines

Inactivated bacterial toxins are widely used as protein carriers in licensed vaccines. Typically oligosaccharides are chemically conjugated to these carriers to induce a more robust immune response against the carbohydrate. For example, capsular polysaccharides from Neisseria meningitidis are conjugated to DT, CRM197 or TT (Pace et al 2009, Dbaibo et al 2013); these carriers are adept at engaging T cells to react to the conjugated polysaccharides. Tetanus toxoid has been shown to add much greater efficacy to carbohydrate vaccines such as from Streptococcus pneumoniae (Harding et al, 2012). Preparation of conjugate vaccines is reviewed in Costantino et al, 2011 and Bröker M et al, 2009.

References

Use of protein carriers in vaccines:


Chemistry used for conjugation of oligosaccharides to vaccine carriers:
