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A Complex Between the Primary Metal Site Mutants of Beta-1,4-galactosyltransferase and Alpha-Lactalbumin

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In the presence of metal ions beta1,4-galactosyltransferase (beta1,4-Gal-T1) transfers galactose from uridine-diphospho-galactose (UDP-Gal) to the acceptor sugar N-acetylglucosamine (GlcNAc). We have determined the crystal structure of the catalytic domain of beta1,4-Gal-T1 and identified the residues involved in the binding of manganese ion. During following visits we collected data on the metal binding site mutants of the catalytic domain of beta1,4-Gal-T1 and also of the catalytic-domain with stem region of the enzyme.