

**Table I - Diffraction data collection statistics.**

	Native	Xenon	Sulphate	disaccharide
Wavelength (Å)	1.54	2.29	0.979	0.979
Range (Å)	22-2.2	35-3.0	63-1.8	93-2.0
R <sub>mrg</sub> (%)	6.9 (44.8)	6.3 (16.9)	10.1 (79.1)	7.6 (34.8)
I/σ(I)	14.6 (2.6)	25.3 (10.9)	14.5 (2.2)	18.6 (5.4)
Completeness	97.2 (92.8)	97.7 (94.2)	99.8 (100)	100 (100)
Multiplicity	3.4 (3.4)	6.6 (6.5)	7.0 (7.1)	7.0 (7.2)
Anomalous completeness		96.3 (94.2)		
Anomalous multiplicity		3.6 (3.5)		

**Table II - phasing statistics for MIRAS using native and Xenon derivative**

Phasing power	
Isomorphous acentric	2.798
Isomorphous centric	2.144
Anomalous acentric	1.361
Figure of merit - acentric	0.194
Figure of merit - centric	0.210

**Table III - X-ray refinement statistics**

	native	Sulphate	Disaccharide
Rmsd bond lengths (Å)	0.006	0.009	0.010
Rmsd bond angles (°)	0.842	1.087	1.135
Reflections used for refinement (work/free)	16289/869	29784/1575	22216/1140
R <sub>work</sub> (%)	23.6	23.1	22.2
R <sub>free</sub> (%)	28.7	28.6	27.1
No. of protein residues	328	338	338
No. of glycerols	1	1	1
No of waters	282	233	262
No of sulphates	0	1	1
Ramachandran plot			
Allowed region (%)	91.2	91.8	91.8
Additional allowed region (%)	8.8	8.2	8.2
Generously allowed region (%)	0	0	0
Disallowed region (%)	0	0	0