

Compound/Molecule Keywords	Method used (also NMR, simulation)	Date Deposited	PDB Identifier	
HEADER	TRANSCRIPTION/DNA	07-FEB-00	1EFA	
TITLE	CRYSTAL STRUCTURE OF THE LAC REPRESSOR DIMER BOUND TO			Title of this PDB submission
TITLE	2 OPERATOR AND THE ANTI-INDUCER ONPF			
COMPND	LAC REPRESSOR/DNA COMPLEX			
KEYWDS	PROTEIN-DNA COMPLEX, HELIX-TURN-HELIX, GENE REGULATION,			
EXPDTA	X-RAY DIFFRACTION			Authors of this PDB submission
AUTHOR	C.E.BELL, M.LEWIS			
JRNL	AUTH C.E.BELL, M.LEWIS			Primary Literature Reference
JRNL	TITL A CLOSER VIEW OF THE CONFORMATION OF THE LAC			
JRNL	TITL 2 REPRESSOR BOUND TO OPERATOR.			
JRNL	REF NAT.STRUCT.BIOL.	V. 7 209 2000		Other Literature Reference(s)
REMARK	1 REFERENCE 1			
REMARK	1 AUTH M.LEWIS, G.CHANG, N.C.HORTON, M.A.KERCHER, H.C.PACE			Sequence of DNA chain D
REMARK	1 TITL CRYSTAL STRUCTURE OF THE LACTOSE OPERON REPRESSOR			
REMARK	1 TITL 2 AND ITS COMPLEXES WITH DNA AND INDUCER			
REMARK	1 REF SCIENCE	V. 271 1247 1996		
REMARK	1 REFN ASTM SCIEAS US ISSN 0036-8075			
SEQRES	1 D 21 G A A T T G T G A G C G C			Sequence of DNA chain D
SEQRES	2 D 21 T C A C A A T T			
...				
SEQRES	1 A 333 MET LYS PRO VAL THR LEU TYR ASP VAL ALA GLU TYR ALA			Sequence of protein chain A
SEQRES	2 A 333 GLY VAL SER TYR GLN THR VAL SER ARG VAL VAL ASN GLN			
SEQRES	3 A 333 ALA SER HIS VAL SER ALA LYS THR ARG GLU LYS VAL GLU			
...				
SEQRES	1 B 333 MET LYS PRO VAL THR LEU TYR ASP VAL ALA GLU TYR ALA			Sequence of protein chain B
SEQRES	2 B 333 GLY VAL SER TYR GLN THR VAL SER ARG VAL VAL ASN GLN			
...				
HETNAM	NPF ORTHONITROPHENYL-BETA-D-FUCOPYRANOSIDE			Heteroatom (non-protein/DNA) declaration
FORMUL	6 NPF 3(C12 H15 N1 O7)			Heteroatom definition
HELIX	1 1 THR A 5 TYR A 12 1		8	Define where the author thinks helices are
HELIX	2 2 SER A 16 ASN A 25 1		10	
HELIX	3 3 ALA A 32 ASN A 46 1		15	
HELIX	4 4 ASN A 50 ALA A 57 1		8	
HELIX	5 5 LEU A 73 LEU A 90 1		18	
...				
SHEET	1 A 4 SER A 93 MET A 98 0			Define where the author thinks beta-sheets are
SHEET	2 A 4 LEU A 63 THR A 68 1 N ILE A 64 O SER A 93			
SHEET	3 A 4 GLY A 121 ASN A 125 1 O GLY A 121 N GLY A 65			
SHEET	4 A 4 ALA A 145 PHE A 147 1 O LEU A 146 N ILE A 124			
...				

