The U. S. National Institutes of Health, Division of Research Resources, has recently approved Brookhaven's application for a grant to carry out data evaluation studies aimed at assessment of the reliability of the structural information in the Protein Data Bank. The major goals of this project, which is funded for three years, are to arrive at a good measure of the errors in refined coordinates, and to study the effects of crystal packing on the structures.

We are pleased to announce that I. D. Kuntz of the University of California, San Francisco, has been appointed a member of the Protein Data Bank Advisory Board, joining M. N. G. James and F. R. Salemme. At this time, we would like to thank J. Hermans for his service on the Board.

In the coming months, Protein Data Bank staff will be participating in the following conferences:

Mid-Atlantic Protein Crystallography Workshop, Gaithersburg MD, May 15-17, F. C. Bernstein
ACA Meeting, Hamilton, Ontario, Canada, June 22-27, T. F. Koetzle
Symposium and Workshop on Macromolecules, Genes, and Computers, Waterville Valley NH, August 12-17, E. E. Abola

We will be happy to meet with users and contributors and to receive comments and suggestions on Data Bank services.

Inquiries may be addressed to any of the persons listed below. The order form on pages 5-6 of this Newsletter may be used to order data from Brookhaven or Cambridge; users in Australia or Japan should contact their centers for detailed information.

Area	Address of Center	Name	
The Americas	Protein Data Bank Chemistry Department Brookhaven National Laboratory Upton, New York 11973, USA	E. E. Abola F. C. Bernstein T. F. Koetzle	516-282-4383 516-282-4382 516-282-4384
Europe and Worldwide	University Chemical Laboratory Lensfield Road Cambridge CB2 1EW, England	O. Kennard S. Bellard W. B. T. Cruse	0223-66499
Australia	CSIRO Central Information Service P. O. Box 89, East Melbourne Victoria 3002, Australia	T. Graddon	03-418-7266
Japan	Institute for Protein Research Osaka University Yamadaoka, 3-2, Suita, Osaka 565, Japan	Y. Katsube K. Yoshida	(06) 877-5111 ext. 3912

Supported by the U. S. National Science Foundation and U. S. National Institutes of Health.

TABLE 1. PROTEIN DATA BANK, INFORMATION AVAILABLE ON MAGNETIC TAPE

21-APR-86

CODE	ITEM	AVAILABILITY US	UK	JA	AUS
DATAPRTP	ALL CURRENT COORDINATE ENTRIES (TABLE 8), COMPUTER PROGRAMS (TABLE 3, PART A), ALL CURRENT BIBLIOGRAPHIC ENTRIES (TABLE 10 - NO COORDINATES IN BIB ENTRIES)	X	X	X	X
YEAR85TP	NEW OR REVISED COORDINATE ENTRIES FOR 1985	X	X		
PART86TP	*NEW OR REVISED COORDINATE ENTRIES 1986 (TO DATE)	X			
PDBPGMTP	COMPUTER PROGRAMS AND MISCELLANEOUS FILES (TABLE 3, PARTS A AND B)	X			
NONST1TP	STRUCTURE FACTOR HOLDINGS (PART 1 - TABLE 4)	X	X	X	
NONST2TP	STRUCTURE FACTOR HOLDINGS (PART 2 - TABLE 5)	X	X	X	
NONST3TP	STRUCTURE FACTOR HOLDINGS (PART 3 - TABLE 6)	X	X	X	
NONST4TP	STRUCTURE FACTOR HOLDINGS (PART 4 - TABLE 7)	X	X	X	
BENDERTP	PARAMETERS FOR BENT-WIRE MODELS	X			
BLDKITTP	MODEL BUILDER*S KIT	PLEASE INQUIRE AT US CENTER			
CONECTTP	CONNECTIVITY SPECIFICATIONS FOR ALL ATOMS	X			
DGPLOTTP	DIAGONAL PLOTS (LINE PRINTER)	X			
DIHDRLTP	COMPLETE TORSION ANGLES	X			
DSTNCETP	CONNECTIVITY SPECIFICATIONS WITH DISTANCES	X			
FISIPLTP	PHI/PSI PLOTS (LINE PRINTER)	X			
PHIPSITP	LISTS OF PHI/PSI/OMEGA VALUES	X			

* NEW OR REPLACEMENT ENTRY SINCE JAN-86 NEWSLETTER

TABLE 2. PROTEIN DATA BANK, INFORMATION AVAILABLE ON MICROFICHE

21-APR-86

CODE	ITEM	AVAILABILITY US	UK	JA	AUS
DATAPRFI	ALL CURRENT COORDINATE ENTRIES (TABLE 8), COMPUTER PROGRAMS (TABLE 3, PART A), ALL CURRENT BIBLIOGRAPHIC ENTRIES (TABLE 10 - NO COORDINATES IN BIB ENTRIES)	X	X	X	
YEAR85FI	NEW OR REVISED COORDINATE ENTRIES FOR 1985	X			
PART86FI	*NEW OR REVISED COORDINATES ENTRIES 1986 (TO DATE)	X			
CORR17FI	LIST OF CORRECTIONS NO. 17 (JUL/85 - JAN/86)	X	X	X	X
NONST1FI	STRUCTURE FACTOR HOLDINGS (PART 1 - TABLE 4)	X	X	X	
NONST2FI	STRUCTURE FACTOR HOLDINGS (PART 2 - TABLE 5)	X	X	X	
NONST3FI	STRUCTURE FACTOR HOLDINGS (PART 3 - TABLE 6)	X	X	X	
NONST4FI	STRUCTURE FACTOR HOLDINGS (PART 4 - TABLE 7)	X	X	X	
BENDERFI	PARAMETERS FOR BENT-WIRE MODELS	X			
BLDKITFI	MODEL BUILDER*S KIT	PLEASE INQUIRE AT US CENTER			
CONECTFI	CONNECTIVITY SPECIFICATIONS FOR ALL ATOMS	X			
DGPLOTFI	DIAGONAL PLOTS (LINE PRINTER)	X			
DIHDRLFI	COMPLETE TORSION ANGLES	X			
DSTNCEFI	CONNECTIVITY SPECIFICATIONS WITH DISTANCES	X			
FISIPLFI	PHI/PSI PLOTS (LINE PRINTER)	X			
PHIPSIFI	LISTS OF PHI/PSI/OMEGA VALUES	X			

* NEW OR REPLACEMENT ENTRY SINCE JAN-86 NEWSLETTER

TABLE 3. PROTEIN DATA BANK, COMPUTER PROGRAMS AND MISCELLANEOUS FILES

21-APR-86

NAME	PURPOSE	AUTHOR(S)	REV DATE/ SUPPORTED
PART A - AVAILABLE ON DATAPRTP, DATAPRFI, PDBPGMTP			
BENDER	PARAMETERS FOR BENT-WIRE MODELS	G.WILLIAMS	4/82 YES
BLDKIT	MODEL BUILDER*S KIT	E.ABOLA	2/84 YES
BRUKTP	MAKE VAX/VMS FILES FROM PDB TAPE	H.BOSSHARD	8/85 NO
CHIRAL	CHECK CHIRALITY	E.ABOLA	1/82 YES
CONECT	GENERATE FULL CONNECTIVITY	F.BERNSTEIN	8/82 YES
CONTCT	INTERMOLECULAR CONTACTS	L.ANDREWS	5/83 NO
DGPLOT	DIAGONAL PLOTS ON PRINTER	E.SWANSON,F.BERNSTEIN	1/83 YES
DIHDRL	COMPLETE TORSION ANGLES	E.ABOLA	3/80 YES
DRCTRY	DIRECTORY OF PDB DISTRIBUTION TAPE	E.ABOLA	5/84 YES
DSSP	SECONDARY STRUCTURE,SOLVENT EXPOSURE	W.KABSCH,C.SANDER	12/83 NO
DSTNCE	CALC DISTANCES FROM CONECT RECORDS	F.BERNSTEIN	8/82 YES
FISIPL	PHI/PSI PLOTS ON PRINTER	F.BERNSTEIN	5/79 YES
LSM	COLOR-CODED ALPHA-CARBON MODELS	R.MATELA,R.FLETTERICK	3/82 NO
NAMOD	BALL-AND-STICK MODEL DISPLAY	Y.BEPPU	11/78 NO
PHIPSI	MAIN-CHAIN TORSION ANGLES	ANDREWS,WILLIAMS,BERNSTEIN	2/79 YES
REFMTE	REFORMAT DATA FOR SUPERTAB,SUPERB	L.RELLICK,J.DUANE	12/83 NO
STEREO	EXTRACT X,Y,Z FROM STEREO DIAGRAMS	M.ROSSMANN	6/79 NO
TAPDIR	PRINT DIRECTORY OF TAPE CONTENTS	H.BERNSTEIN,F.BERNSTEIN	11/79 YES
THEOD	MEASURE COORDINATES WITH THEODOLITE	L.LEBIODA	1/82 NO
TORSRU	COMPLETE TORSION ANGLES	G.REEKE	10/79 NO
TOTALS	VALIDATION OF MASTER RECORD	L.ANDREWS,F.BERNSTEIN	3/82 YES
PART B - AVAILABLE ON PDBPGMTP			
ALB	SECONDARY STRUCT. CALC., PREDICTION	A.FINKELSTEIN,O.PTITSYN	10/85 NO
CRYSTAL	DATA BASE - PROTEIN CRYSTALLIZATION	G.GILLILAND	12/84 NO

* NEW OR REPLACEMENT ENTRY SINCE JAN-86 NEWSLETTER

SUPPORTED PROGRAMS ARE THOSE FOR WHICH STAFF OF THE PROTEIN DATA BANK WILL PROVIDE CORRECTIONS FOR DEMONSTRATED ERRORS.

TABLE 4. PROTEIN DATA BANK, STRUCTURE FACTOR HOLDINGS (PART 1, SEE ALSO TABLES 5,6,7)

21-APR-86

IDENT CODE	MOLECULE	DEPOSITOR	DATE/ CODE
R1ACTSF	ACTINIDIN	E.BAKER	7/77 SF
CHYMOF	ALPHA-CHYMOTRYPSIN (TOSYL)	D.BLOW	4/73 SF
RCARP04	CALCIUM-BINDING PARVALBUMIN	R.KRETSINGER	2/74 SF
RCARP05	CALCIUM-BINDING PARVALBUMIN	R.KRETSINGER	2/74 SF
R2B5CSF	CYTOCHROME B5	F.S.MATHEWS	12/77 SF
R3CYTSF	CYTOCHROME C (ALBACORE, OXIDIZED)	T.TAKANO,R.DICKERSON	7/80 SF
R4CYTSF	CYTOCHROME C (ALBACORE, REDUCED)	T.TAKANO,R.DICKERSON	7/80 SF
RCYC5501	CYTOCHROME C550	R.TIMKOVICH	4/76 SF
R1ZNASF	DNA(Z',CGCG,HIGH-SALT,SYNTHETIC)	H.DREW,R.DICKERSON	1/81 SF
R1BNASF	DNA(B,CGCGAATTCGCG,SYNTHETIC,290 DEG K)	H.DREW,R.DICKERSON	1/81 SF
RGPD04	GLYCERALDEHYDE-3-P-DEHYDROGENASE(LOBSTR)	M.ROSSMANN	8/75 SF
R2GPDSF	APO-GLYCERALDEHYDE-3-P-DEHYDROGENASE	M.ROSSMANN	12/79 SF
R2MHBSF	HEMOGLOBIN (HORSE, AQUO MET AND CO)	LADNER,HEIDNER,PERUTZ	6/80 SF
R1FDHSF	HEMOGLOBIN (HUMAN, FETAL, DEOXY)	J.FRIER	6/80 SF
RHUMDEH02	HEMOGLOBIN (HUMAN,DEOXY)	M.PERUTZ,G.FERMI	5/75 SF
LAMPRY1	HEMOGLOBIN (LAMPREY)	HENDRICKSON,LOVE,KARLE	5/73 SF
RLDH06	LACTATE DEHYDROGENASE	M.ROSSMANN	8/75 SF
RLDH07	LACTATE DEHYDROGENASE/NAD/PYRUVATE	M.ROSSMANN	8/75 SF
R5LDHSF	LACTATE DEHYDROGENASE/S-LAC/NAD (PIG)	U.GRAU,M.ROSSMANN	1/81 SF
R1LZHSF	LYSOZYME (HEN EGG-WHITE, MONOCLINIC)	C.BLAKE,D.RICE	6/81 SF
R2LZHSF	LYSOZYME (HEN EGG-WHITE, ORTHORHOMBIC)	C.BLAKE,D.RICE	6/81 SF
RMETMYSF1	MYOGLOBIN (SPERM WHALE, MET)	T.TAKANO	6/76 SF
RDEMYSF1	MYOGLOBIN (SPERM WHALE, DEOXY)	T.TAKANO	6/76 SF
R4TNASF	TRANSFER RNA (YEAST, PHE)	A.JACK,J.LADNER,A.KLUG	6/80 SF

CODES

SF STRUCTURE FACTORS

TABLE 5. PROTEIN DATA BANK, STRUCTURE FACTOR HOLDINGS (PART 2, SEE ALSO TABLES 4,6,7)

21-APR-86

IDENT CODE	MOLECULE	DEPOSITOR	DATE/ CODE
R1CCRSF	CYTOCHROME C (RICE)	H.OCHI,N.TANAKA	3/83 SF
R351CSF	CYTOCHROME C551 (OXIDIZED)	T.TAKANO,R.DICKERSON	9/81 SF
R451CSF	CYTOCHROME C551 (REDUCED)	T.TAKANO,R.DICKERSON	9/81 SF
R1ANASF	DNA(A,D-IODO-CCGG)SPACE GROUP P 43 21 2	B.CONNER,R.DICKERSON	6/82 SF
R1ANAP2	DNA(A,D-IODO-CCGG)SPACE GROUP P 21	B.CONNER,R.DICKERSON	6/82 SF
R2BNASF	DNA(B,CGCGAATTCGCG,SYNTHETIC,16 DEG K)	H.DREW,R.DICKERSON	11/81 SF
R3BNASF	DNA(B,9-BR-CGCGAATTCGCG,20 DEG C)	KOPKA,FRATINI,DICKERSON	2/82 SF
R4BNASF	DNA(B,9-BR-CGCGAATTCGCG, 7 DEG C)	KOPKA,FRATINI,DICKERSON	2/82 SF
R5BNASF	DNA(B,CGCGAATTCGCG,SYNTHETIC)/CISPLATIN	WING,PJURA,DREW,DCKRSN	8/83 SF
R1GAASF	GLUTAMINASE-ASPARAGINASE(ACINETOBACTER)	H.AMMON	12/82 SF
R1GASSF	GLUTAMINASE-ASPARAGINASE(PSEUDOMONAS 7A)	H.AMMON	12/82 SF
R1HMQSF	HEMERYTHRIN(MET)	STENKAMP,SIEKER,JENSEN	2/83 SF
R1HMZSF	HEMERYTHRIN(AZIDO,MET)	STENKAMP,SIEKER,JENSEN	2/83 SF
R2INSSF	INSULIN(BOVINE,2-ZINC)DES-PHE B1	C.REYNOLDS,G.DODSON	5/82 SF
R1LH1SF	LEGHEMOGLOBIN(ACETATE MET)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R2LH1SF	LEGHEMOGLOBIN(ACETATE MET)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R1LH2SF	LEGHEMOGLOBIN(AQUO MET)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R2LH2SF	LEGHEMOGLOBIN(AQUO MET)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R1LH3SF	LEGHEMOGLOBIN(CYANO MET)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R2LH3SF	LEGHEMOGLOBIN(CYANO MET)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R1LH4SF	LEGHEMOGLOBIN(DEOXY)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R2LH4SF	LEGHEMOGLOBIN(DEOXY)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R1LH5SF	LEGHEMOGLOBIN(FLUORO MET)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R2LH5SF	LEGHEMOGLOBIN(FLUORO MET)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R1LH6SF	LEGHEMOGLOBIN(NICOTINATE MET)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R2LH6SF	LEGHEMOGLOBIN(NICOTINATE MET)	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R1LH7SFR	LEGHEMOGLOBIN(FERRO)/NITROSOBENZENE	VAINSHTEIN,HARUTYUNYAN	2/83 SF
R2LH7SF	LEGHEMOGLOBIN(FERRO)/NITROSOBENZENE	VAINSHTEIN,HARUTYUNYAN	4/82 SF
R1LYMSF	LYSOZYME(HEN EGG-WHITE,MONOCLINIC)	HOGLE,RAO,SUNDARALINGAM	7/82 SF
R1MLTSF	MELITTIN	TERWILLIGER,EISENBERG	8/81 SF
R1OVOSF	OVOMUCOID FRAGMENT(JAPANESE QUAIL)	E.PAPAMOKOS,R.HUBER	1/82 SF
R2BP2SF	PROPHOSPHOLIPASE A2 (BOVINE)	DIJKSTRA,HOL,DRENTH	9/81 SF
R1PYPSF	INORGANIC PYROPHOSPHATASE	E.HARUTYUNYAN ET AL.	2/83 SF
R1RN3SF	RIBONUCLEASE A	BORKAKOTI,MOSS,PALMER	6/82 SF
R3TLNSF	THERMOLYSIN(NATIVE)	B.MATTHEWS,M.HOLMES	2/82 SF
R2PTNSF	TRYPSIN(ORTHORHOMBIC,2.4M (NH4)2SO4)	J.WALTER,R.HUBER	10/81 SF
R1TPOSF	TRYPSIN(ORTHORHOMBIC)	BODE,WALTER,HUBER	9/82 SF
R3PTNSF	TRYPSIN(TRIGONAL,2.4M (NH4)2SO4)	J.WALTER,R.HUBER	10/81 SF
R3PTBSF	TRYPSIN(BENZAMIDINE INHIBITED)	BODE,SCHWAGER,WALTER	9/82 SF
R1TPPSF	TRYPSIN/P-AMIDINO-PHENYL-PYRUVATE	WALTER,BODE,HUBER	9/82 SF
R4PTISF	TRYPSIN INHIBITOR(BOVINE,PANCREAS)	R.HUBER,J.DEISENHOFER	9/82 SF
R2PTCSF	TRYPSIN/TRYPSIN INHIBITOR COMPLEX	R.HUBER,J.DEISENHOFER	9/82 SF
R1TPASF	TRYPSIN(ANHYDRO)/TRYPSIN INHIBITOR	HUBER,BODE,DEISENHOFER	9/82 SF
R2TGASF	TRYPSINOGEN(2.4M MGSO4)	J.WALTER,R.HUBER	10/81 SF
R1TGCSF	TRYPSINOGEN(.5 CH3OH,.5 HOH)	J.WALTER,R.HUBER	10/81 SF
R1TGTSF	TRYPSINOGEN(173 DEG K,.7 CH3OH,.3 HOH)	J.WALTER,R.HUBER	10/81 SF
R2TGTSF	TRYPSINOGEN(103 DEG K,.7 CH3OH,.3 HOH)	J.WALTER,R.HUBER	10/81 SF
R2TGPSF	TRYPSINOGEN/TRYPSIN INHIBITOR	R.HUBER ET AL.	9/82 SF
R3TPISF	TRYPSINOGEN/TRYPSIN INHIBITOR/ILE-VAL	R.HUBER ET AL.	9/82 SF
R2TPISF	TRYPSINOGEN/PTI/ILE-VAL (MERCURATED)	J.WALTER,R.HUBER	10/81 SF
R1TGSSF	TRYPSINOGEN/PSTI	R.HUBER ET AL.	9/82 SF

CODES

SF STRUCTURE FACTORS

TABLE 6. PROTEIN DATA BANK, STRUCTURE FACTOR HOLDINGS (PART 3, SEE ALSO TABLES 4,5,7)

21-APR-86

IDENT CODE	MOLECULE	DEPOSITOR	DATE/ CODE
R1CATSF	CATALASE(BEEF LIVER)	M.ROSSMANN	11/81 SF
R4CHASF	ALPHA-CHYMOTRYPSIN(BOVINE)	H.TSUKADA,D.BLOW	11/84 SF
R2GCHSF	GAMMA-CHYMOTRYPSIN	COHEN,DAVIES,SILVERTON	7/84 SF
R2C2CSF	CYTOCHROME C2(OXIDIZED)	BHATIA,FINZEL,KRAUT	11/83 SF
R3C2CSF	CYTOCHROME C2(REDUCED)	BHATIA,FINZEL,KRAUT	11/83 SF
R2ANASF	DNA(A,GGGGCCCC,SYNTHETIC)	MCCALL,BROWN,KENNARD	8/85 SF
R6BNASF	DNA(B,CGCGAATTCGCG,SYNTHETIC)/NETROPSIN	M.KOPKA,R.DICKERSON	8/84 SF
R7BNASF	DNA(B,CGCGAATTCGCG,ANISO TEMP FACTORS)	HOLBROOK,DICKERSON,KIM	1/85 SF
R1FX1SF	FLAVODOXIN(D.VULGARIS,UNREFINED)	WATENPAUGH,SIEKR,JENSN	10/84 SF
R1GP1SF	GLUTATHIONE PEROXIDASE(BOVINE)	O.EPP,R.LADENSTEIN	6/85 SF
R2HHBSF	HEMOGLOBIN(HUMAN,DEOXY)	G.FERMI,M.PERUTZ	3/84 SF
R1HHOSF	HEMOGLOBIN(HUMAN,OXY)	B.SHAANAN	3/84 SF
R1MCPSF	IGA FAB(KAPPA)MCPC603	G.COHEN ET AL.	7/84 SF
R2MCPSF	IGA FAB(KAPPA)MCPC603/PHOSPHOCHOLINE	PADLAN,COHEN,DAVIES	10/84 SF
R1PFCSF	IGG PFC FRAGMENT	S.BRYANT ET AL.	4/85 SF
R1LZTSF	LYSOZYME(HEN EGG-WHITE,TRICLINIC)	HDSDN,BRWN,SIEKR,JENSN	4/85 SF
R1MBOSF	MYOGLOBIN(SPERM WHALE,OXY)	S.PHILLIPS	3/84 SF
R2OVOSF	OVOMUCOID THIRD DOMAIN(SILVER PHEASANT)	W.BODE,O.EPP	6/85 SF
R1PPDSF	PAPAIN D	J.JANSONIUS	10/84 SF
R3RP2SF	PROTEINASE II(RAT MAST CELL)	S.REMINGTON,B.MATTHEWS	9/84 SF
R5PTISFX	PTI(X-RAY)	A.WLODAWER,R.HUBER	10/84 SF
R5PTISFN	PTI(NEUTRON)	A.WLODAWER,R.HUBER	10/84 SF
R5RSASFX	RIBONUCLEASE A(X-RAY)	A.WLODAWER	6/85 SF
R5RSASFN	RIBONUCLEASE A(NEUTRON)	A.WLODAWER	6/85 SF
R5RXNSF	RUBREDOXIN(C.PASTEURIANUM)	WATENPAUGH,SIEKR,JENSN	10/84 SF
R2VSBSF	VIRUS COAT PROTEIN(SBMV, T=1)	M.ROSSMANN	4/85 SF
R4SBVSF	VIRUS COAT PROTEIN(SOUTHERN BEAN MOSAIC)	M.ROSSMANN	4/85 SF

CODES

SF STRUCTURE FACTORS

TABLE 7. PROTEIN DATA BANK, STRUCTURE FACTOR HOLDINGS (PART 4, SEE ALSO TABLES 4,5,6)

21-APR-86

IDENT CODE	MOLECULE	DEPOSITOR	DATE/ CODE
R2ICBSF	CALCIUM-BINDING PROTEIN(INTESTINAL)	D.SZEBENYI,K.MOFFAT	12/85 SF
R2CCYSF	CYTOCHROME C(PRIME)	B.FINZEL ET AL.	8/85 SF
R2CYPSF	CYTOCHROME C PEROXIDASE(YEAST)	FINZEL,POULOS,KRAUT	8/85 SF
R1RSMSF	LYS 7-DNP-LYS 41 RIBONUCLEASE A	B.FINZEL ET AL.	8/85 SF

* NEW OR REPLACEMENT ENTRY SINCE JAN-86 NEWSLETTER

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TABLE 8. PROTEIN DATA BANK, ATOMIC COORDINATE HOLDINGS

21-APR-86

IDENT CODE	MOLECULE	DEPOSITOR(S)	DATE/ STATUS	
2APE	ACID PROTEINASE(ENDOTHIA PARASITICA)	T.BLUNDELL	9/81	
2APP	ACID PROTEINASE(PENICILLIUMJANTHINELLUM)	A.SIELECKI,M.JAMES	1/83	
1APR	ACID PROTEINASE(RHIZOPUS CHINENSIS)	D.DAVIES	8/79	
2ACT	ACTINIDIN	E.BAKER	11/79	
1ACX	ACTINOXANTHIN	V.PLETNEV,A.KUZIN	12/82	
2ADK	ADENYLATE KINASE (PORCINE MUSCLE)	G.SCHULZ	3/77	
1AGA	AGAROSE	S.ARNOTT	5/78	
3WGA	*AGGLUTININ (WHEAT GERM)	C.WRIGHT	3/86	R
4ADH	ALCOHOL DEHYDROGENASE (APO)	C.-I.BRANDEN	8/79	
5ADH	ALCOHOL DEHYDROGENASE(APO)/ADP-RIBOSE	H.EKLUND,T.A.JONES	1/84	
6ADH	ALCOHOL DEHYDROGENASE(HOLO)/NADH/DMSO	H.EKLUND,	1/84	
7ADH	ALCOHOL DEHYDRGNSE(ISONICOTINIMIDYLATED)	B.PLAPP,H.EKLUND	1/84	
2ALP	ALPHA-LYTIC PROTEASE	M.FUJINAGA,M.JAMES	3/85	R
2TAA	TAKA-AMYLASE	KUSUNOKI,MATSUURA,KAKUDO	10/82	
5API	ALPHA 1-ANTITRYPSIN(MODIFIED,TETRAGONAL)	R.HUBER ET AL.	10/84	
6API	ALPHA 1-ANTITRYPSIN(MODIFIED,HEXAGONAL)	R.HUBER ET AL.	10/84	
1ABP	L-ARABINOSE-BINDING PROTEIN	F.QUIOCHO,G.GILLILAND	5/80	
1AAT	CYTOSOLIC ASPARTATE AMINOTRANSFERASE	HARUTYUNYAN,MALASHKEVICH	4/82	A
2ATC	ASPARTATE CARBAMOYLTRANSFERASE	W.LIPSCOMB	3/82	
4ATC	ASPARTATE CARBAMOYLTRANSFERASE	W.LIPSCOMB	4/84	
5ATC	ASPARTATE CARBAMOYLTRANSFERASE/CTP	W.LIPSCOMB	4/84	R
1AZA	AZURIN(ALCALIGENES DENITRIFICANS)	E.BAKER,G.NORRIS	5/84	
1AZU	AZURIN(PSEUDOMONAS AERUGINOSA)	E.ADMAN,L.SIEKER,L.JENSEN	8/80	
2BCL	BACTERIOCHLOROPHYLL A-PROTEIN	B.MATTHEWS	1/79	A
2ABX	*ALPHA-BUNGAROTOXIN	R.LOVE,R.STROUD	2/86	R
1CPV	CALCIUM-BINDING PARVALBUMIN SET 6A	R.KRETSINGER	8/74	
2CPV	CALCIUM-BINDING PARVALBUMIN SET 6H	R.KRETSINGER	8/74	
3CPV	CALCIUM-BINDING PARVALBUMIN SET 6I	R.KRETSINGER	8/74	
2ICB	CALCIUM-BINDING PROTEIN(INTESTINAL)	D.SZEBENYI,K.MOFFAT	12/85	R
1CAP	CAPSULAR POLYSACCHARIDE (E. COLI M41)	S.ARNOTT	5/78	
2CAB	CARBONIC ANHYDRASE B (HUMAN)	K.KANNAN	10/83	
1CAC	CARBONIC ANHYDRASE C (HUMAN)	K.KANNAN	5/76	
3CPA	CARBOXYPEPTIDASE A/GLYCYLTYROSINE	D.REES,W.LIPSCOMB	3/82	
4CPA	CARBOXYPEPTIDASE A/POTATO INHIBITOR	D.REES,W.LIPSCOMB	3/82	
5CPA	CARBOXYPEPTIDASE A/WATER (BOVINE)	D.REES,W.LIPSCOMB	5/82	
1CPB	CARBOXYPEPTIDASE B (BOVINE)	M.SCHMID,J.HERRIOTT	6/76	A
1PTE	D-ALANYL-CARBOXYPEPTIDASE-TRANSPEPTIDASE	J.KELLY,J.KNOX,P.MOEWS	10/85	A
1CAR	CARRAGEENAN	S.ARNOTT	5/78	
7CAT	CATALASE(BEEF LIVER)	I.FITA,M.ROSSMANN	11/84	R
8CAT	CATALASE(BEEF LIVER)	I.FITA,M.ROSSMANN	11/84	R
4CAT	CATALASE(PENICILLIUM VITALE)	B.VAINSHTEIN ET AL.	2/83	B
1C4S	CHONDROITIN-4-SULFATE	S.ARNOTT	5/78	
2C4S	CHONDROITIN-4-SULFATE (CA SALT)	S.ARNOTT	5/78	
2CHA	ALPHA-CHYMOTRYPSIN (TOSYL)	D.BLOW	1/75	
4CHA	ALPHA-CHYMOTRYPSIN(BOVINE)	H.TSUKADA,D.BLOW	11/84	
5CHA	ALPHA-CHYMOTRYPSIN(BOVINE)	R.BLEVINS,A.TULINSKY	1/85	R
2GCH	GAMMA-CHYMOTRYPSIN	COHEN,DAVIES,SILVERTON	5/80	
1CHG	CHYMOTRYPSINOGEN	J.KRAUT,J.BIRKTOFT	3/75	
1CTS	CITRATE SYNTHASE(PIG)	REMINGTON,WIEGAND,HUBER	1/84	
2CTS	CITRATE SYNTHASE/PIG,COA,CITRATE CMPLX)	REMINGTON,WIEGAND,HUBER	1/84	
3CTS	CITRATE SYNTHASE(CHICKEN,COA,CITRATE)	REMINGTON,WIEGAND,HUBER	1/84	
4CTS	CITRATE SYNTHASE(PIG,OXALOACETATE CMPLX)	REMINGTON,WIEGAND,HUBER	1/84	
1CTX	ALPHA COBRATOXIN	W.SAENGER,M.WALKINSHAW	3/82	
2CNA	CONCANAVALIN A	G.REEKE,J.BECKER,G.EDELMAN	4/75	
3CNA	CONCANAVALIN A	K.HARDMAN	9/76	
1CNI	CONCANAVALIN A (DEMETALLIZED)	M.SHOHAM	12/81	
1CRN	CRAMBIN	W.HENDRICKSON,M.TEETER	5/81	
1GCR	GAMMA-II CRYSTALLIN (CALF)	T.BLUNDELL	8/85	
2B5C	CYTOCHROME B5 (OXIDIZED)	F.S.MATHEWS	12/77	
156B	CYTOCHROME B562 (E.COLI,OXIDIZED)	BETHGE,CZERWINSKI,MATHEWS	8/79	
3CYT	CYTOCHROME C (ALBACORE, OXIDIZED)	T.TAKANO,R.DICKERSON	7/80	
4CYT	CYTOCHROME C (ALBACORE, REDUCED)	T.TAKANO,R.DICKERSON	7/80	
1CYC	CYTOCHROME C (BONITO, HEART)	M.KAKUDO	8/76	
1CCR	CYTOCHROME C (RICE)	H.OCHI,N.TANAKA	3/83	
2CCY	CYTOCHROME C(PRIME)	B.FINZEL ET AL.	8/85	R
2CYP	CYTOCHROME C PEROXIDASE(YEAST)	B.FINZEL,T.POULOS,J.KRAUT	8/85	R
2C2C	CYTOCHROME C2(OXIDIZED)	G.BHATIA,B.FINZEL,J.KRAUT	11/83	
3C2C	CYTOCHROME C2(REDUCED)	G.BHATIA,B.FINZEL,J.KRAUT	11/83	
1CY3	CYTOCHROME C3	R.HASER,M.FREY,F.PAYAN	6/85	
2CDV	CYTOCHROME C3(DESULFOVIBRIO VULGARIS)	N.YASUOKA,M.KAKUDO	11/83	
1CC5	CYTOCHROME C5(OXIDIZED,AZOTOBACTER VNLD)	C.D.STOUT,D.CARTER	8/84	
155C	CYTOCHROME C550	R.TIMKOVICH	8/76	
351C	CYTOCHROME C551 (OXIDIZED)	MATSUURA,TAKANO,DICKERSON	7/81	
451C	CYTOCHROME C551 (REDUCED)	MATSUURA,TAKANO,DICKERSON	7/81	
1CPP	CYTOCHROME P450(CAM,PSEUDOMONAS PUTIDA)	T.POULOS ET AL.	11/85	
3DFR	DIHYDROFOLATE REDUCTASE (L.CASEI)	J.BOLIN,D.MATTHEWS,J.KRAUT	6/82	
4DFR	DIHYDROFOLATE REDUCTASE (E. COLI)	J.BOLIN,D.MATTHEWS,J.KRAUT	6/82	
1ANA	DNA(A,5(PRIME)-D-IODO-CCGG-3(PRIME))	B.CONNER,R.DICKERSON	6/82	
2ANA	DNA(A,GGGGCCCC,SYNTHETIC)	M.MCCALL,T.BROWN,O.KENNARD	8/85	
1BNA	DNA(B,CGCGAATTCGCG,SYNTHETIC,290 DEG K)	H.DREW,R.DICKERSON	1/81	
2BNA	DNA(B,CGCGAATTCGCG,SYNTHETIC,16 DEG K)	H.DREW,R.DICKERSON	11/81	
3BNA	DNA(B,9-BR-CGCGAATTCGCG,SYNTH,20 DEG C)	KOPKA,FRATINI,DICKERSON	2/82	
4BNA	DNA(B,9-BR-CGCGAATTCGCG,SYNTH, 7 DEG C)	KOPKA,FRATINI,DICKERSON	2/82	
5BNA	DNA(B,CGCGAATTCGCG,SYNTHETIC)/CISPLATIN	WING,PJURA,DREW,DICKERSON	8/83	
6BNA	DNA(B,9-BR-CGCGAATTCGCG,SYNTH)/NETROPSIN	M.KOPKA,R.DICKERSON	8/84	
7BNA	DNA(B,CGCGAATTCGCG,ANISO TEMP FACTORS)	HOLBROOK,DICKERSON,KIM	1/85	
1ZNA	DNA(Z-I,CGCG,HIGH-SALT,SYNTHETIC)	H.DREW,R.DICKERSON	1/81	
2GN5	GENE-5 DNA BINDING PROTEIN	G.BRAYER,A.MCPHERSON	1/86	R
1EST	ELASTASE (PORCINE, TOSYL)	H.WATSON	5/76	
2EBX	ERABUTOXIN B (SEA SNAKE)	B.LOW	9/85	
1ECD	ERYTHROCRUORIN (REDUCED, DEOXY)	W.STEIGEMANN,E.WEBER	3/79	
1ECO	ERYTHROCRUORIN (CARBONMONOXY)	W.STEIGEMANN,E.WEBER	3/79	
1ECA	ERYTHROCRUORIN (AQUO, MET)	W.STEIGEMANN,E.WEBER	3/79	
1ECN	ERYTHROCRUORIN (CYANO, MET)	W.STEIGEMANN,E.WEBER	3/79	
2FD1	FERREDOXIN (AZOTOBACTER VINELANDII)	STOUT,GHOSH,FUREY,ODONNELL	11/81	
1FDX	FERREDOXIN (PEPTOCOCCUS AEROGENES)	E.ADMAN,L.SIEKER,L.JENSEN	8/76	
3FXC	FERREDOXIN (SPIRULINA PLATENSIS)	TSUKIHARA,KATSUBE,KAKUDO	12/81	
3FXN	FLAVODOXIN (CLOSTRIDIUM MP,OXIDIZED)	M.LUDWIG	12/77	
4FXN	FLAVODOXIN (CLOSTRIDIUM MP,SEMIQUINONE)	M.LUDWIG	12/77	
1FX1	FLAVODOXIN(D.VULGARIS,UNREFINED)	WATENPAUGH,SIEKER,JENSEN	10/84	
1GBP	GALACTOSE-BINDING PROTEIN	S.MOWBRAY,G.PETSKO	8/83	A
1GCN	GLUCAGON	T.BLUNDELL	10/77	
1PGI	GLUCOSE-6-PHOSPHATE ISOMERASE	H.MUIRHEAD	7/77	A
1GP1	GLUTATHIONE PEROXIDASE(BOVINE)	O.EPP,R.LADENSTEIN	6/85	
2GRS	GLUTATHIONE REDUCTASE (HUMAN)	G.SCHULZ	11/81	
1GPD	GLYCERALDEHYDE-3-P-DEHYDROGENASE(LOBSTR)	M.ROSSMANN	7/75	
2GPD	APO-GLYCERALDEHYDE-3-P-DEHYDROGENASE	M.ROSSMANN	12/79	
3GPD	GLYCERALDEHYDE-3-P-DEHYDROGENASE(HUMAN)	H.WATSON,J.CAMPBELL	6/83	
1HRB	HEMERYTHRIN B	W.HENDRICKSON	6/76	A
1HMQ	HEMERYTHRIN(MET)	STENKAMP,SIEKER,JENSEN	2/83	
1HMZ	HEMERYTHRIN(AZIDO,MET)	STENKAMP,SIEKER,JENSEN	2/83	
1HR3	HEMERYTHRIN(AZIDO,MET,SIPHONOSOMA)	SMITH,HENDRICKSON,ADDISON	5/83	
1HDS	HEMOGLOBIN (DEER, SICKLE CELL)	E.AMMA,R.GIRLING	10/79	
2MHB	HEMOGLOBIN (HORSE, AQUO MET)	R.LADNER,HEIDNER,PERUTZ	2/77	
2DHB	HEMOGLOBIN (HORSE, DEOXY)	M.PERUTZ,G.FERMI	11/73	
2HHB	HEMOGLOBIN(HUMAN,DEOXY)	G.FERMI,M.PERUTZ	3/84	R
3HHB	HEMOGLOBIN(HUMAN,DEOXY,SYMMETRY AVRGD)	G.FERMI,M.PERUTZ	3/84	R
4HHB	HEMOGLOBIN(HUMAN,DEOXY,UNRESTRAINED)	G.FERMI,M.PERUTZ	3/84	R
1HCO	HEMOGLOBIN(HUMAN,CARBONMONOXY)	J.BALDWIN	8/79	
2HCO	HEMOGLOBIN(HUMAN,CARBONMONOXY,NRG REFND)	J.BALDWIN	8/79	
1HHO	HEMOGLOBIN (HUMAN, OXY)	B.SHAANAN	6/83	
1FDH	HEMOGLOBIN (HUMAN, FETAL, DEOXY)	J.FRIER	8/76	
1HBS	HEMOGLOBIN S (HUMAN,SICKLE CELL)	E.PADLAN,W.LOVE	6/82	
2LHB	HEMOGLOBIN V(CYANO,MET,SEA LAMPREY)	HONZATKO,HENDRICKSON,LOVE	8/85	R
2YHX	HEXOKINASE (YEAST) FORM BIII	STEITZ,ANDERSON,STENKAMP	3/78	
1HKG	HEXOKINASE A - GLUCOSE COMPLEX (YEAST)	W.BENNETT JR.,T.STEITZ	12/80	
1HIP	HIGH POTENTIAL IRON PROTEIN	J.KRAUT	4/75	
1HYA	HYALURONIC ACID (NA SALT, 3-FOLD HELIX)	S.ARNOTT	11/77	
2HYA	HYALURONIC ACID (NA SALT, 4-FOLD HELIX)	S.ARNOTT	5/78	
3HYA	HYALURONIC ACID (NA SALT, 2-FOLD HELIX)	S.ARNOTT	5/78	
4HYA	HYALURONIC ACID (CA SALT, 3-FOLD HELIX)	S.ARNOTT	5/78	
1MCP	IGA FAB(KAPPA)MCPC603	SATOW,COHEN,PADLAN,DAVIES	7/84	
2MCP	IGA FAB(KAPPA)MCPC603/PHOSPHOCHOLINE	E.PADLAN,G.COHEN,D.DAVIES	10/84	
1FB4	IMMUNOGLOBULIN FAB (LAMBDA) KOL	M.MARQUART,R.HUBER	5/83	
3FAB	IMMUNOGLOBULIN FAB.PRIME. NEW	R.POLJAK	9/81	
1MCG	IMMUNOGLOBULIN B-J INTACT MCG	SCHIFFER,EDMUNDSON ET AL.	5/78	A
1REI	IMMUNOGLOBULIN B-J FRAGMENT(V-DIMER)REI	O.EPP,R.HUBER	3/76	
2RHE	IMMUNOGLOBULIN B-J FRAGMENT(V-MNMER)RHE	FUREY,WANG,YOO,SAX	6/83	
1FC1	IMMUNOGLOBULIN FC (HUMAN)	J.DEISENHOFER	5/81	
1FC2	IMMUNOGLOBULIN FC-FRAGMENT B COMPLEX	J.DEISENHOFER	5/81	
1PFC	IGG PFC FRAGMENT	L.M.AMZEL	10/81	
1IG2	IMMUNOGLOBULIN G1 (LAMBDA) KOL	M.MARQUART,R.HUBER	5/83	
1INS	INSULIN(PORCINE,2-ZINC)	G.DODSON,D.HODGKIN	7/80	
2INS	INSULIN(BOVINE,2-ZINC) DES-PHE B1	C.REYNOLDS,G.DODSON	5/82	
2PKA	KALLIKREIN A(PORCINE)	W.BODE,Z.CHEN	5/84	
2KAI	KALLIKREIN A(PORCINE)/PTI(BOVINE)	W.BODE,Z.CHEN	5/84	
1KGA	KDPG ALDOLASE	A.TULINSKY	8/78	A
1KES	KERATAN SULFATE	S.ARNOTT	5/78	
4LDH	LACTATE DEHYDROGENASE (DOGFISH)	W.EVENTOFF,M.ROSSMANN	4/77	
3LDH	LACTATE DEHYDROGENASE/NAD/PYRUVATE(DOGF)	M.ROSSMANN	11/74	
5LDH	LACTATE DEHYDROGENASE/S-LAC/NAD (PIG)	U.GRAU,M.ROSSMANN	10/80	
1LDX	LACTATE DEHYDROGENASE (MOUSE TESTES)	W.MUSICK,M.ROSSMANN	9/78	
1LH1	LEGHEMOGLOBIN(ACETATE MET)	VAINSHTEIN,HARUTYUNYAN	4/82	
2LH1	LEGHEMOGLOBIN(ACETATE MET)	VAINSHTEIN,HARUTYUNYAN	4/82	
1LH2	LEGHEMOGLOBIN(AQUO MET)	VAINSHTEIN,HARUTYUNYAN	4/82	
2LH2	LEGHEMOGLOBIN(AQUO MET)	VAINSHTEIN,HARUTYUNYAN	4/82	
1LH3	LEGHEMOGLOBIN(CYANO MET)	VAINSHTEIN,HARUTYUNYAN	4/82	
2LH3	LEGHEMOGLOBIN(CYANO MET)	VAINSHTEIN,HARUTYUNYAN	4/82	
1LH4	LEGHEMOGLOBIN(DEOXY)	VAINSHTEIN,HARUTYUNYAN	4/82	
2LH4	LEGHEMOGLOBIN(DEOXY)	VAINSHTEIN,HARUTYUNYAN	4/82	
1LH5	LEGHEMOGLOBIN(FLUORO MET)	VAINSHTEIN,HARUTYUNYAN	4/82	
2LH5	LEGHEMOGLOBIN(FLUORO MET)	VAINSHTEIN,HARUTYUNYAN	4/82	
1LH6	LEGHEMOGLOBIN(NICOTINATE MET)	VAINSHTEIN,HARUTYUNYAN	4/82	
2LH6	LEGHEMOGLOBIN(NICOTINATE MET)	VAINSHTEIN,HARUTYUNYAN	4/82	
1LH7	LEGHEMOGLOBIN(FERRO)/NITROSOBENZENE	VAINSHTEIN,HARUTYUNYAN	4/82	
2LH7	LEGHEMOGLOBIN(FERRO)/NITROSOBENZENE	VAINSHTEIN,HARUTYUNYAN	4/82	
1LZM	LYSOZYME (BACTERIOPHAGE T4)	B.MATTHEWS	3/77	
1LYZ	LYSOZYME (HEN EGG-WHITE, SET W2)	R.DIAMOND,D.PHILLIPS	2/75	
2LYZ	LYSOZYME (HEN EGG-WHITE, SET RS5D)	R.DIAMOND,D.PHILLIPS	2/75	
3LYZ	LYSOZYME (HEN EGG-WHITE, SET RS6A)	R.DIAMOND,D.PHILLIPS	2/75	
4LYZ	LYSOZYME (HEN EGG-WHITE, SET RS9A)	R.DIAMOND,D.PHILLIPS	2/75	
5LYZ	LYSOZYME (HEN EGG-WHITE, SET RS12A)	R.DIAMOND,D.PHILLIPS	2/75	
6LYZ	LYSOZYME (HEN EGG-WHITE, SET RS16)	R.DIAMOND,D.PHILLIPS	2/75	
7LYZ	LYSOZYME (HEN EGG-WHITE, TRICLINIC)	A.YONATH	5/77	
1LZT	LYSOZYME(HEN EGG-WHITE,TRICLINIC)	HODSDON,BROWN,SIEKER,JENSN	4/85	
8LYZ	LYSOZYME (HEN EGG-WHITE, INACTIVATED)	S.OATLEY	9/77	
9LYZ	LYSOZYME(HEN,NAM-NAG-NAM SUBSTRATE ONLY)	J.KELLY,M.JAMES	12/79	
1LZH	LYSOZYME (HEN EGG-WHITE,MONOCLINIC)	ARTYMIUK,BLAKE,RICE,WILSON	6/81	A
2LZH	LYSOZYME (HEN EGG-WHITE,ORTHORHOMBIC)	ARTYMIUK,BLAKE,RICE,WILSON	6/81	A
1LYM	LYSOZYME(HEN EGG-WHITE,MONOCLINIC)	HOGLE,RAO,SUNDARALINGAM	7/82	
1LZ1	LYSOZYME (HUMAN)	P.ARTYMIUK,C.BLAKE	10/84	
1LZ2	LYSOZYME (TURKEY EGG-WHITE)	R.BOTT,R.SARMA	9/81	A
2MDH	MALATE DEHYDROGENASE	J.BIRKTOFT,L.BANASZAK	3/83	
1MLT	MELITTIN	TERWILLIGER,EISENBERG	8/81	
2MT2	CD,ZN METALLOTHIONEIN(ISOFORM II)	C.D.STOUT	10/85	R
1MBS	MYOGLOBIN (SEAL, MET)	H.SCOULOUDI	3/79	
1MBN	MYOGLOBIN (SPERM WHALE, MET)	H.WATSON	4/73	
2MBN	MYOGLOBIN (SPERM WHALE, MET)	T.TAKANO	9/76	
3MBN	MYOGLOBIN (SPERM WHALE, DEOXY)	T.TAKANO	9/76	
1MBD	MYOGLOBIN (SPERM WHALE, DEOXY)	S.PHILLIPS	8/81	
1MBO	MYOGLOBIN (SPERM WHALE, OXY)	S.PHILLIPS	8/81	
1MB5	MYOGLOBIN(SPERM WHALE,CO,NEUTRON)	HANSON,NORVELL,SCHOENBORN	11/82	
1MHR	MYOHEMERYTHRIN	W.HENDRICKSON	6/76	A
1NXB	NEUROTOXIN B (LATICAUDA SEMIFASCIATA)	D.TSERNOGLOU,G.PETSKO	8/80	
1SN3	SCORPION NEUROTOXIN(VARIANT 3)	C.BUGG ET AL.	12/82	
1OVO	OVOMUCOID THIRD DOMAIN(JAPANESE QUAIL)	E.PAPAMOKOS,R.HUBER	1/82	
2OVO	OVOMUCOID THIRD DOMAIN(SILVER PHEASANT)	W.BODE,O.EPP	6/85	
1PPT	AVIAN PANCREATIC POLYPEPTIDE	T.BLUNDELL	1/81	
8PAP	PAPAIN (NATIVE)	J.DRENTH	11/76	
1PAD	PAPAIN (ACE-ALA-ALA-PHE-ALA, CYS-25)	J.DRENTH	11/76	
2PAD	PAPAIN (CYS DERIV OF CYS-25)	J.DRENTH	11/76	
3PAD	PAPAIN (OXIDIZED CYS-25)	J.DRENTH	11/76	
4PAD	PAPAIN (TOS-LYS, CYS-25)	J.DRENTH	11/76	
5PAD	PAPAIN (BZOXY-GLY-PHE-GLY, CYS-25)	J.DRENTH	11/76	
6PAD	PAPAIN (BZOXY-PHE-ALA, CYS-25)	J.DRENTH	11/76	
1PPD	PAPAIN D	J.JANSONIUS	10/84	
1PEP	PEPSIN (PORCINE)	N.ANDREEVA ET AL.	7/78	A
3PGK	PHOSPHOGLYCERATE KINASE (YEAST)	H.WATSON	7/82	
2PGK	PHOSPHOGLYCERATE KINASE (HORSE)	P.EVANS,C.BLAKE	9/76	B
3PGM	PHOSPHOGLYCERATE MUTASE	H.WATSON	4/82	
1BP2	PHOSPHOLIPASE A2 (BOVINE)	B.DIJKSTRA,J.DRENTH	4/81	
2BP2	PROPHOSPHOLIPASE A2 (BOVINE)	B.DIJKSTRA,W.HOL,J.DRENTH	6/81	
3BP2	PHOSPHOLIPASE A2 (BOVINE) TRANSAMINATED	B.DIJKSTRA,J.DRENTH	6/83	
1P2P	PHOSPHOLIPASE A2 (PORCINE)	B.DIJKSTRA ET AL.	6/83	
1PP2	*PHOSPHOLIPASE A2(CA-FREE,RATTLESNAKE)	S.BRUNIE,P.SIGLER	3/86	
1PCY	PLASTOCYANIN(POPLAR,CU2+)	J.GUSS,H.FREEMAN	8/80	
2PCY	PLASTOCYANIN(POPLAR,APO)	GARRETT,GUSS,FREEMAN	11/83	
3PCY	PLASTOCYANIN(HG2+ SUBSTITUTED)	CHURCH,GUSS,POTTER,FREEMAN	12/85	
2PAB	PREALBUMIN (HUMAN, PLASMA)	S.OATLEY,C.BLAKE	9/77	
2SGA	PROTEINASE A(STREPTOMYCES GRISEUS)	M.JAMES,A.SIELECKI	1/83	
3SGB	PROTEINASE B(STREP. GRISEUS)/OMTKY3	A.SIELECKI ET AL.	1/83	
3RP2	PROTEINASE II(RAT MAST CELL)	S.REMINGTON,B.MATTHEWS	9/84	
1PYP	INORGANIC PYROPHOSPHATASE	E.HARUTYUNYAN ET AL.	2/83	
1PYK	PYRUVATE KINASE (CAT)	H.MUIRHEAD	1/80	A
1RHD	RHODANESE	W.HOL	12/77	
5RSA	RIBONUCLEASE A (X-RAY+NEUTRON)	A.WLODAWER	4/85	
6RSA	*RIBONUCLEASE A/URIDINE VANADATE COMPLEX	A.WLODAWER	2/86	
1RN3	RIBONUCLEASE A	BORKAKOTI,MOSS,PALMER	10/81	
1RSM	LYS 7-DNP-LYS 41 RIBONUCLEASE A	B.FINZEL ET AL.	8/85	
1RNS	RIBONUCLEASE S	H.WYCKOFF,F.RICHARDS	4/73	
4RXN	RUBREDOXIN(C.PASTEURIANUM,UNCONSTR REF)	WATENPAUGH,SIEKER,JENSEN	10/84	R
5RXN	RUBREDOXIN(C.PASTEURIANUM,NRG+XTAL REF)	K.WATENPAUGH	10/84	R
3RXN	RUBREDOXIN(DESULFOVIBRIO VULGARIS)	E.ADMAN,L.SIEKER,L.JENSEN	9/80	
2SNS	STAPHYLOCOCCAL NUCLEASE	M.LEGG,F.A.COTTON,E.HAZEN	5/82	
2SSI	SUBTILISIN INHIBITOR (STREPTOMYCES)	Y.MITSUI ET AL.	4/80	
1SBT	SUBTILISIN BPN.PRIME.	J.KRAUT	8/72	
2SBT	SUBTILISIN NOVO	J.DRENTH	9/76	
1SIC	SUBTILISIN BPN(PRIME)/SSI COMPLEX	Y.MITSUI ET AL.	4/84	A
2SOD	SUPEROXIDE DISMUTASE	J.RICHARDSON,D.RICHARDSON	3/80	
3TLN	THERMOLYSIN(NATIVE)	B.MATTHEWS,M.HOLMES	2/82	
4TLN	THERMOLYSIN(L-LEU-NHOH)	B.MATTHEWS,M.HOLMES	2/82	
5TLN	THERMOLYSIN(HONH-BZMALONYL-A-G-NTROANLD)	B.MATTHEWS,M.HOLMES	2/82	
7TLN	THERMOLYSIN(CH2CO(N-OH)LEUOCH3)	B.MATTHEWS,M.HOLMES	1/83	
1SRX	THIOREDOXIN (E. COLI, OXIDIZED)	B.-O.SODERBERG	5/76	A
9TNA	TRANSFER RNA(YEAST,ASP)	WESTHOF,DUMAS,MORAS	6/85	
4TNA	TRANSFER RNA (YEAST, PHE)	A.JACK,J.LADNER,A.KLUG	4/78	
6TNA	TRANSFER RNA (YEAST, PHE)	S.-H.KIM ET AL.	11/78	
8TNA	TRANSFER RNA (YEAST, PHE)	M.SUNDARALINGAM	2/79	
1TIM	TRIOSE PHOSPHATE ISOMERASE	I.WILSON,D.PHILLIPS	9/76	
2TNC	TROPONIN-C (TURKEY)	O.HERZBERG,M.JAMES	2/85	A
2PTN	TRYPSIN(ORTHORHOMBIC,2.4M (NH4)2SO4)	J.WALTER,R.HUBER,W.BODE	10/81	
1TPO	TRYPSIN(ORTHORHOMBIC)	W.BODE,J.WALTER,R.HUBER	9/82	
3PTN	TRYPSIN(TRIGONAL,2.4M (NH4)2SO4)	J.WALTER,R.HUBER,W.BODE	10/81	
3PTB	TRYPSIN(BENZAMIDINE INHIBITED)	W.BODE,P.SCHWAGER,J.WALTER	9/82	
1TPP	TRYPSIN/P-AMIDINO-PHENYL-PYRUVATE	J.WALTER,W.BODE,R.HUBER	9/82	
3PTP	TRYPSIN (DIP INHIBITED)	J.CHAMBERS,R.STROUD	12/77	
4PTI	TRYPSIN INHIBITOR(BOVINE,PANCREAS)	R.HUBER,J.DEISENHOFER	9/82	
5PTI	TRYPSIN INHIBITOR(BOVINE,XRAY+NEUTRON)	A.WLODAWER,R.HUBER	10/84	
2PTC	TRYPSIN/TRYPSIN INHIBITOR COMPLEX	R.HUBER,J.DEISENHOFER	9/82	
1TPA	TRYPSIN(ANHYDRO)/TRYPSIN INHIBITOR	HUBER,BODE,DEISENHOFER	9/82	
1TGN	TRYPSINOGEN	A.KOSSIAKOFF,R.STROUD	9/79	
2TGA	TRYPSINOGEN(2.4M MGSO4)	J.WALTER,R.HUBER,W.BODE	10/81	
1TGC	TRYPSINOGEN(.5 CH3OH,.5 HOH)	J.WALTER,R.HUBER,W.BODE	10/81	
1TGT	TRYPSINOGEN(173 DEG K,.7 CH3OH,.3 HOH)	J.WALTER,R.HUBER,W.BODE	10/81	
2TGT	TRYPSINOGEN(103 DEG K,.7 CH3OH,.3 HOH)	J.WALTER,R.HUBER,W.BODE	10/81	
1TGB	TRYPSINOGEN (WITH CA, FROM PEG)	BODE,FEHLHAMMER,HUBER	3/79	
2TGP	TRYPSINOGEN/TRYPSIN INHIBITOR	R.HUBER ET AL.	9/82	
3TPI	TRYPSINOGEN/TRYPSIN INHIBITOR/ILE-VAL	R.HUBER ET AL.	9/82	

continued on page 4

continued from page 3

2TPI	TRYPSINOGEN/PTI/ILE-VAL (MERCURATED)	J.WALTER,R.HUBER,W.BODE	10/81
4TPI	TRYPSINOGEN/ARG-15-PTI/VAL-VAL	W.BODE,J.WALTER	6/85
1TGS	TRYPSINOGEN/PSTI	R.HUBER ET AL.	9/82
1TSI	TYROSYL TRANSFER RNA SYNTHETASE	BHAT,BLOW,BRICK,NYBORG	7/82 A
1RHV	RHINOVIRUS 14(HUMAN)	ROSSMANN,ARNOLD,VRIEND	10/85 A
2STV	VIRUS (SATELLITE TOBACCO NECROSIS)	T.A.JONES,L.LILJAS	6/84
4SBV	VIRUS COAT PROTEIN(SOUTHERN BEAN MOSAIC)	M.ROSSMANN	4/85 R
2TBV	VIRUS (TOMATO BUSHY STUNT)	S.HARRISON	6/84

MODEL STRUCTURES

2ZNA	DNA(Z-I,CGCGCG,SYNTHETIC,MODEL)	A.RICH	2/81
3ZNA	DNA(Z-II,CGCGCG,SYNTHETIC,MODEL)	A.RICH	2/81
1DNN	DNA(ATCGGCTAAG...,MODEL)	J.SUSSMAN,E.TRIFONOV	11/82
1IGE	IMMUNOGLOBULIN E(FC FRAGMENT)MODEL	E.PADLAN,D.DAVIES	1/85
1GF1	INSULIN-LIKE GROWTH FACTOR I (MODEL)	BLUNDELL,BEDARKAR,HUMBEL	12/82
1GF2	INSULIN-LIKE GROWTH FACTOR II (MODEL)	BLUNDELL,BEDARKAR,HUMBEL	12/82
1MLP	MUREIN LIPOPROTEIN (MODEL)	A.MCLACHLAN	8/78
1RLX	RELAXIN(MODEL,CONFORMATION A,UNREFINED)	A.EVANS,A.NORTH	3/78
2RLX	RELAXIN(MODEL,CONFORMATION B,UNREFINED)	A.EVANS,A.NORTH	3/78
3RLX	RELAXIN(MODEL,CONFORMATION A,REFINED)	A.EVANS,A.NORTH	3/78
4RLX	RELAXIN(MODEL,CONFORMATION B,REFINED)	A.EVANS,A.NORTH	3/78
1TNC	TROPONIN (CA-BINDING COMPONENT,MODEL)	R.KRETSINGER,C.D.BARRY	6/80 A

* NEW OR REPLACEMENT ENTRY SINCE JAN-86 NEWSLETTER

STATUS CODES

BLANK	STANDARD ENTRY AVAILABLE FOR DISTRIBUTION
A	ALPHA CARBON ATOMS ONLY
B	BACKBONE ONLY
R	RECENT (1984-1986) REPLACEMENT FOR AN OUT-OF-DATE PARAMETER SET

TABLE 9. COORDINATE AND STRUCTURE FACTOR ENTRIES IN PREPARATION

21-APR-86

IDENT CODE	MOLECULE	DEPOSITOR(S)	DATE/ STATUS
1CGA	*CHYMOTRYPSINOGEN A	D.WANG,W.BODE,R.HUBER	4/86 P
2EST	*ELASTASE-TFAP COMPLEX (PORCINE)	L.SIEKER,D.HUGHES	3/86 N
1GAP	*CATABOLITE GENE ACTIVATOR PTN/CYCLIC AMP	I.WEBER,T.STEITZ	3/86 N
2GAP	*CATABOLITE GENE ACTIVATOR PTN/DNA(MODEL)	I.WEBER,T.STEITZ	3/86 N
9PAP	*PAPAIN (OXIDIZED CYS 25)	I.KAMPHUIS,J.DRENTH	3/86 RP
1SGC	*PROTEINASE A(STREP.GRISEUS)/CHYMOSTATIN	L.DELBAERE,G.BRAYER	4/86 P
2TGD	*TRYPSINOGEN(DIP-INHIBITED,BOVINE)	M.JONES,R.STROUD	3/86 N

* NEW OR REPLACEMENT ENTRY SINCE JAN-86 NEWSLETTER

STATUS CODES

A	ALPHA CARBON ATOMS ONLY
B	BACKBONE ONLY
N	NEW ENTRY AWAITING APPROVAL BY DEPOSITOR
P	IN PREPARATION
R	REPLACEMENT FOR ENTRY IN TABLE 8
SF	STRUCTURE FACTORS

Table 9 Revisions:

1GAP available for distribution
2GAP available for distribution

2RHV human rhinovirus full set of coordinates - now in preparation

TABLE 10. PROTEIN DATA BANK, BIBLIOGRAPHIC ENTRIES (NO COORDINATES)

21-APR-86

0EAP	ACID PROTEINASE (ENDOTHIA PARASITICA)
0AF1	APOFERRITIN (HORSE)
0MAA	MITOCHONDRIAL ASPARTATE AMINOTRANSFERASE
0RNB	BARNASE (BACILLUS AMYLOLIQUEFACIENS)
0CPT	*CALCIUM-BINDING PARVALBUMIN - TERBIUM COMPLEX
0CLN	CALMODULIN(CHICKEN)
0CDI	CALOTROPIN DI (CALOTROPIS GIGANTEA)
0ZGP	D-ALANYL-D-ALANINE PEPTIDASE (ZN2+ G PEPTIDASE)
0GCI	GAMMA-CHYMOTRYPSIN - INACTIVATOR COMPLEX
0CGA	*CHYMOTRYPSINOGEN A (BOVINE)
0CN2	CONCANAVALIN A (DEMETALLIZED)
0CRO	CRO REPRESSOR
05C1	CYTOCHROME C555 (CHLOROBIUM THIOSULFATOPHILUM)
0C3A	DES-ARG77-C3A ANAPHYLATOXIN
0CDF	DIHYDROFOLATE REDUCTASE (CHICKEN LIVER)
0DN1	*DNA(GGGGTCCC,SYNTHETIC)
0AN8	DNA(GGTATACC)
0AN8	DNA(GG+UA+UACC)
0GTC	DNA (A,GGGGCTCC,SYNTHETIC)
0DPI	DNA POLYMERASE I
0ESZ	ELASTASE COMPLEX (PIG)
0EFM	*ELONGATION FACTOR TU (TRYPSIN-MODIFIED)
0ETU	ELONGATION FACTOR TU COMPLEX (E. COLI)
0FXI	FERREDOXIN I(APHANOTHECE SACRUM)
0FX3	FLAVODOXIN(OXIDIZED,ANACYSTIS NIDULANS)
0FX2	FLAVODOXIN (REDUCED, CLOSTRIDIUM MP)
0GBP	D-GALACTOSE-BINDING PROTEIN(ESCHERICHIA COLI)
0GAP	CATABOLITE GENE ACTIVATOR PROTEIN
0GD1	D-GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE (BACILLUS STEAROTHERMOPHILUS)
0GOX	*GLYCOLATE OXIDASE (SPINACH)
0HMG	HEMAGGLUTININ
0HPI	HEMOCYANIN(PANULIRUS INTERRUPTUS)
0DCH	HEMOGLOBIN (COBALT,DEOXY)
0HBG	HEMOGLOBIN (GLYCERA DIBRANCHIATA)
0HBT	*HEMOGLOBIN (T STATE, HUMAN)
0PHH	P-HYDROXYBENZOATE HYDROXYLASE (PSEUDOMONAS FLUORESCENS)
0AUI	IMMUNOGLOBULIN, BENCE-JONES FRAGMENT (KAPPA) AU
0ROY	IMMUNOGLOBULIN, BENCE-JONES FRAGMENT (V-MONOMER,KAPPA) ROY
0IG1	IMMUNOGLOBULIN G1 (KAPPA) DOB
0IN4	INSULIN (HUMAN)
0IN1	INSULIN (PORCINE)
0IN2	INSULIN (PORCINE)
0IN3	DESPENTAPEPTIDE INSULIN(BEEF)
0LRP	N-TERMINAL DOMAIN OF LAMBDA REPRESSOR
0GLM	LYSOZYME(EMBDEN GOOSE)
0LZ5	LYSOZYME(HEN EGG-WHITE, NEUTRON STUDY)
0LZE	*LYSOZYME(HEN EGG-WHITE,DEUTERATED ETHANOL)
0LZT	LYSOZYME(HEN EGG-WHITE,HIGH-TEMPERATURE)
0LZ6	LYSOZYME (STREPTOMYCES ERYTHRAEUS)
0TEL	LYSOZYME(TORTOISE EGG-WHITE)
0CTF	L7/L12 (E. COLI, C-TERMINUS)
0B2M	BETA2-MICROGLOBULIN
0MBA	MYOGLOBIN (APLYSIA LIMACINA)
0MBM	MYOGLOBIN (SPERM WHALE, MET, TEMPERATURE STUDIES)
0MB3	MYOGLOBIN (SPERM WHALE, MET, NEUTRON STUDY)
0PSG	*PEPSINOGEN (PORCINE)
0PFK	PHOSPHOFRUCTOKINASE (BACILLUS STEAROTHERMOPHILUS)
0PGL	*PHOSPHOGLUCOMUTASE (RABBIT)
0PP2	PHOSPHOLIPASE A2 (RATTLESNAKE)
0PPA	PHOSPHORYLASE A (RABBIT)
0PB1	PHOSPHORYLASE B (RABBIT)
0PRC	*PHOTOSYNTHETIC REACTION CENTER (RHODOPSEUDOMONAS VIRIDIS)
0SGC	COMPLEX (PROTEINASE A - CHYMOSTATIN)
0RX5	RELAXIN (PORCINE, MODEL)
0RSA	RIBONUCLEASE A (BOVINE)
0RBS	RIBONUCLEASE(BOVINE SEMINAL)
0RBI	RIBONUCLEASE BI(BINASE)
0RST	RIBONUCLEASE ST (STREPTOMYCES ERYTHREUS)
0RNT	RIBONUCLEASE T1-2(PRIME)-GUANYLIC ACID (ASPERGILLUS ORYZAE)
0SEC	*SUBTILISIN CARLSBERG - EGLIN-C COMPLEX(BACILLUS SUBTILIS AND LEECH)
0SNI	*SUBTILISIN NOVO - CHYMOTRYPSINOGEN INHIBITOR 2 COMPLEX
0SBP	SULFATE-BINDING PROTEIN
0SDE	FE-SUPEROXIDE DISMUTASE(ESCHERICHIA COLI)
0SDP	FE-SUPEROXIDE DISMUTASE(PSEUDOMONAS OVALIS)
0SDM	*MN-SUPEROXIDE DISMUTASE(THERMUS THERMOPHILUS)
0THI	THAUMATIN
0TT4	THIOREDOXIN REDUCTASE (BACTERIOPHAGE T4)
0FMT	INITIATOR TRANSFER RNA (E. COLI, F/MET)
0TA1	TRANSFER RNA (YEAST, ASP, A FORM)
0TN1	*TRANSFER RNA (YEAST, ASP, PB, PH 7.4)
0TN2	*TRANSFER RNA (YEAST, ASP, PB, PH 5.0)
0TR1	TRANSFER RNA (YEAST, PHE)
0MTS	METHIONYL TRANSFER RNA SYNTHETASE
0YPI	TRIOSE PHOSPHATE ISOMERASE (SACCHAROMYCES CEREVISIAE)
0WRP	*TRP REPRESSOR (ESCHERICHIA COLI)
0UBQ	UBIQUITIN(HUMAN)
0UTG	UTEROGLOBIN (RABBIT)
0PLV	*VIRUS (POLIO, HUMAN)
0TMV	VIRUS PROTEIN DISK (TOBACCO MOSAIC)

* NEW OR REPLACEMENT ENTRY SINCE JAN-86 NEWSLETTER

ORDER FORM **(Please include a self-addressed label)**

1. Name _____ Date _____

   Address _____ Telephone _____

   _____

   _____

2. Documentation desired (no charge).
   - ( ) Latest Newsletter
   - ( ) Introduction to The Protein Data Bank (August 1985)
   - ( ) Sources of Visual Aids for Macromolecular Structure (October 1985)
   - ( ) Atomic Coordinate and Bibliographic Entry Format Description for DATAPRTP and DATAPRFI (January 1985)
   - ( ) Current DATAPRTP Directory
   - ( ) Non-Standard Entries (Structure Factors) Format Description
   - ( ) Data Deposition form

3. Please send the following magnetic tape items (from Table 1).

DATAPRTP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $260(£200)	**( ) 1600 cpi, EBCDIC, $260(£200)**
	( ) 800 cpi, ASCII, $300(£231)	**( ) 800 cpi, EBCDIC, $300(£231)**
YEAR85TP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $220(£169)	**( ) 800 cpi, EBCDIC, $220(£169)**
PART86TP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $220(£169)	**( ) 800 cpi, EBCDIC, $220(£169)**
PDBPGMTP	**( ) 6250 cpi, ASCII, $220**	**This product is available only in VAX/VMS ANSI labelled magnetic tape format based on Level 3 of the ANSI Standard.**
	( ) 1600 cpi, ASCII, $220	
	( ) 800 cpi, ASCII, $220	
NONST1TP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $260(£200)	**( ) 800 cpi, EBCDIC, $260(£200)**
NONST2TP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $260(£200)	**( ) 800 cpi, EBCDIC, $260(£200)**
NONST3TP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $260(£200)	**( ) 800 cpi, EBCDIC, $260(£200)**
NONST4TP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $220(£169)	**( ) 800 cpi, EBCDIC, $220(£169)**
BENDERTP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $220(£169)	**( ) 800 cpi, EBCDIC, $220(£169)**
CONECTTP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $260(£200)	**( ) 1600 cpi, EBCDIC, $260(£200)**
	( ) 800 cpi, ASCII, $300(£231)	**( ) 800 cpi, EBCDIC, $300(£231)**
DGPLOTTP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $220(£169)	**( ) 800 cpi, EBCDIC, $220(£169)**
DIHDRLTP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $260(£200)	**( ) 800 cpi, EBCDIC, $260(£200)**
DSTNCETP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $260(£200)	**( ) 1600 cpi, EBCDIC, $260(£200)**
	( ) 800 cpi, ASCII, $300(£231)	**( ) 800 cpi, EBCDIC, $300(£231)**
FISIPLTP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $220(£169)	**( ) 800 cpi, EBCDIC, $220(£169)**
PHIPSITP	**( ) 6250 cpi, ASCII, $220(£169)**	**( ) 6250 cpi, EBCDIC, $220(£169)**
	( ) 1600 cpi, ASCII, $220(£169)	**( ) 1600 cpi, EBCDIC, $220(£169)**
	( ) 800 cpi, ASCII, $220(£169)	**( ) 800 cpi, EBCDIC, $220(£169)**

Special Instructions (to be completed for Brookhaven requests only). Please check the appropriate box.

( ) We are especially interested in the pending entries with the following Ident Codes: _____ _____ _____. Please delay shipment until the date _____ if any of these entries are expected to be available by that date.

( ) Normal order-will be processed as soon as possible.

4. Please send the following microfiche items (from Table 2). Each microfiche item costs $182 (£140), postage included. Correction fiche are free.

Items: Total Cost: _____

5. Please send the following printed listings. Each listing costs $74 (£57), postage included.

Ident Code(s) (From Table 7): Total Cost: _____

6. Foreign air mail postage for tapes from Brookhaven to destinations outside the U. S. and Canada or from Cambridge to destinations outside the U. K. A postage surcharge of $16 (£17) is required per item.

Number of items x $16.00 (£17) = _____

7. Total charges

Magnetic tape charges (3 above)	_____
Microfiche charges (4 above)	_____
Printed listing charges (5 above)	_____
Foreign air mail postage charges (6 above)	_____
Bank charge (Brookhaven only) for checks not drawn in US dollars on US bank. $10	_____
Total	_____

Method of Payment:

Cambridge: Cambridge prefers that no check is sent with order. Inclusion of purchase order is desirable but not mandatory.

Brookhaven: Brookhaven requires that either a check or written purchase order payable to Brookhaven National Laboratory be received before service is provided.

( ) check is ( ) enclosed
( ) purchase order number _____ ( ) sent separately

Please return to

Ms. F. C. Bernstein
Chemistry Department
Brookhaven National Laboratory
Upton, New York 11973 USA

or

Dr. W. B. T. Cruse
University Chemical Laboratory
Lensfield Road
Cambridge CB2 1EW, England

It is advisable to send a photocopy of this order form directly to the center filling the order; experience shows that purchasing departments often do not forward this form with the order.