



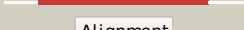

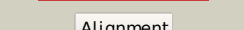

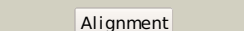





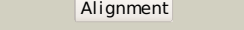

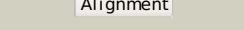

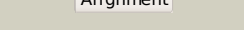

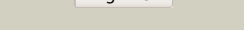



#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3nbxX_	 Alignment		100.0	18	PDB header: hydrolase Chain: X: PDB Molecule: atpase rava; PDBTitle: crystal structure of e. coli rava (regulatory atpase variant a) in2 complex with adp
2	c2r44A_	 Alignment		100.0	20	PDB header: hydrolase Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative atpase (chu_0153) from cytophaga2 hutchinsonii atcc 33406 at 2.00 a resolution
3	c1ny5A_	 Alignment		99.9	12	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigm54 activator (aaa+ atpase) in the inactive2 state
4	c3f8tA_	 Alignment		99.9	14	PDB header: hydrolase Chain: A: PDB Molecule: predicted atpase involved in replication control, PDBTitle: crystal structure analysis of a full-length mcm homolog2 from methanopyrus kandleri
5	c3k1jA_	 Alignment		99.9	18	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent protease lon; PDBTitle: crystal structure of lon protease from thermococcus onnurineus na1
6	d1g8pa_	 Alignment		99.9	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
7	c3dzdA_	 Alignment		99.9	13	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigma54 activator ntrc4 in the inactive2 state
8	d1ny5a2	 Alignment		99.9	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
9	c1qvrB_	 Alignment		99.9	22	PDB header: chaperone Chain: B: PDB Molecule: clpb protein; PDBTitle: crystal structure analysis of clpb
10	c3cf1C_	 Alignment		99.9	14	PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97/vcp in complex with adp/adp.alfx
11	c1r6bX_	 Alignment		99.9	16	PDB header: hydrolase Chain: X: PDB Molecule: clpa protein; PDBTitle: high resolution crystal structure of clpa

12	d1um8a_	Alignment		99.9	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
13	c3pfiB_	Alignment		99.9	16	PDB header: hydrolase Chain: B: PDB Molecule: holliday junction atp-dependent dna helicase ruvb; PDBTitle: 2.7 angstrom resolution crystal structure of a probable holliday2 junction dna helicase (ruvb) from campylobacter jejuni subsp. jejuni3 nctc 11168 in complex with adenosine-5'-diphosphate
14	d1g41a_	Alignment		99.9	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
15	d1r6bx3	Alignment		99.9	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
16	c2c99A_	Alignment		99.9	17	PDB header: transcription regulation Chain: A: PDB Molecule: psp operon transcriptional activator; PDBTitle: structural basis of the nucleotide driven conformational2 changes in the aaa domain of transcription activator pspf
17	d1ofha_	Alignment		99.9	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
18	c1xwiA_	Alignment		99.9	20	PDB header: protein transport Chain: A: PDB Molecule: skd1 protein; PDBTitle: crystal structure of vps4b
19	c3hteC_	Alignment		99.9	14	PDB header: motor protein Chain: C: PDB Molecule: atp-dependent clp protease atp-binding subunit clpx; PDBTitle: crystal structure of nucleotide-free hexameric clpx
20	c2dhrC_	Alignment		99.9	20	PDB header: hydrolase Chain: C: PDB Molecule: ftsh; PDBTitle: whole cytosolic region of atp-dependent metalloprotease2 ftsh (g3991)
21	c3pxiB_	Alignment	not modelled	99.9	21	PDB header: protein binding Chain: B: PDB Molecule: negative regulator of genetic competence clpc/meccb; PDBTitle: structure of meca108:clpc
22	c3b9pA_	Alignment	not modelled	99.9	19	PDB header: hydrolase Chain: A: PDB Molecule: cg5977-pa, isoform a; PDBTitle: spastin
23	c3f9vA_	Alignment	not modelled	99.9	18	PDB header: hydrolase Chain: A: PDB Molecule: minichromosome maintenance protein mcm; PDBTitle: crystal structure of a near full-length archaeal mcm: functional2 insights for an aaa+ hexameric helicase
24	c1ojlF_	Alignment	not modelled	99.9	13	PDB header: response regulator Chain: F: PDB Molecule: transcriptional regulatory protein zrar; PDBTitle: crystal structure of a sigma54-activator suggests the2 mechanism for the conformational switch necessary for3 sigma54 binding
25	d1qvr3	Alignment	not modelled	99.8	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
26	clin8A_	Alignment	not modelled	99.8	16	PDB header: dna binding protein Chain: A: PDB Molecule: holliday junction dna helicase ruvb; PDBTitle: thermotoga maritima ruvb t158v
27	c3d8bB_	Alignment	not modelled	99.8	15	PDB header: hydrolase Chain: B: PDB Molecule: fidgetin-like protein 1; PDBTitle: crystal structure of human fidgetin-like protein 1 in complex with adp
28	c2zamA_	Alignment	not modelled	99.8	20	PDB header: protein transport Chain: A: PDB Molecule: vacuolar protein sorting-associating protein 4b;

					PDBTitle: crystal structure of mouse skd1/vps4b apo-form PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97 n-d1 r86a mutant in complex with atpgs
29	c3hu2C_	Alignment	not modelled	99.8	22
30	d2ce7a2	Alignment	not modelled	99.8	22
31	c3pvsA_	Alignment	not modelled	99.8	18
32	dlixsb2	Alignment	not modelled	99.8	19
33	c3eihB_	Alignment	not modelled	99.8	18
34	c3h4mC_	Alignment	not modelled	99.8	21
35	dlin4a2	Alignment	not modelled	99.8	16
36	cls3sA_	Alignment	not modelled	99.8	23
37	c2ce7B_	Alignment	not modelled	99.8	22
38	cliy2A_	Alignment	not modelled	99.8	21
39	c2c9oC_	Alignment	not modelled	99.8	16
40	dljbka_	Alignment	not modelled	99.8	17
41	c2r65A_	Alignment	not modelled	99.8	21
42	dlixza_	Alignment	not modelled	99.8	21
43	clhqcB_	Alignment	not modelled	99.7	19
44	c2x8aA_	Alignment	not modelled	99.7	21
45	c2qz4A_	Alignment	not modelled	99.7	21
46	dlfnna2	Alignment	not modelled	99.7	10
47	dlr6bx2	Alignment	not modelled	99.7	18
48	c2p65A_	Alignment	not modelled	99.7	20
49	clnsfA_	Alignment	not modelled	99.7	17
50	dlqvra2	Alignment	not modelled	99.7	19
51	c2chgB_	Alignment	not modelled	99.7	17
52	c3u5zM_	Alignment	not modelled	99.6	19
53	dl18qa2	Alignment	not modelled	99.6	13

54	c3pxgA	Alignment	not modelled	99.6	22	PDB header: protein binding Chain: A: PDB Molecule: negative regulator of genetic competence clpc/mech; PDBTitle: structure of meca121 and clpc1-485 complex
55	d1r7ra3	Alignment	not modelled	99.6	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
56	d1sxd2	Alignment	not modelled	99.6	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
57	d1iqpa2	Alignment	not modelled	99.6	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
58	d1sxb2	Alignment	not modelled	99.6	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
59	d1lv7a	Alignment	not modelled	99.6	23	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
60	d1njfa	Alignment	not modelled	99.6	12	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
61	c2hbcC	Alignment	not modelled	99.6	13	PDB header: replication Chain: C: PDB Molecule: chromosomal replication initiator protein dnaa; PDBTitle: structure of amppcp-bound dnaa from aquifex aeolicus
62	d1w5sa2	Alignment	not modelled	99.6	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
63	d1e32a2	Alignment	not modelled	99.6	22	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
64	c1sxC	Alignment	not modelled	99.6	16	PDB header: replication Chain: C: PDB Molecule: activator 1 40 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader2 (replication factor c, rfc) bound to the dna sliding clamp3 (proliferating cell nuclear antigen, pcna)
65	d1sxc2	Alignment	not modelled	99.6	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
66	c2chvE	Alignment	not modelled	99.6	17	PDB header: dna-binding protein Chain: E: PDB Molecule: replication factor c small subunit; PDBTitle: replication factor c adpnp complex
67	c1xxhB	Alignment	not modelled	99.6	19	PDB header: transferase Chain: B: PDB Molecule: dna polymerase iii subunit gamma; PDBTitle: atpgs bound e. coli clamp loader complex
68	d1d2na	Alignment	not modelled	99.6	19	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
69	c3co5B	Alignment	not modelled	99.6	9	PDB header: transcription regulator Chain: B: PDB Molecule: putative two-component system transcriptional response PDBTitle: crystal structure of sigma-54 interaction domain of putative2 transcriptional response regulator from neisseria gonorrhoeae
70	c1sxD	Alignment	not modelled	99.6	14	PDB header: replication Chain: D: PDB Molecule: activator 1 41 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader2 (replication factor c, rfc) bound to the dna sliding clamp3 (proliferating cell nuclear antigen, pcna)
71	c3bosA	Alignment	not modelled	99.6	12	PDB header: hydrolase regulator,dna binding protein Chain: A: PDB Molecule: putative dna replication factor; PDBTitle: crystal structure of a putative dna replication regulator hda2 (sama_1916) from shewanella amazonensis sb2b at 1.75 a resolution
72	c3qmzA	Alignment	not modelled	99.6	13	PDB header: motor protein Chain: A: PDB Molecule: cytoplasmic dynein heavy chain; PDBTitle: crystal structure of the cytoplasmic dynein heavy chain motor domain
73	c1sxjE	Alignment	not modelled	99.6	13	PDB header: replication Chain: E: PDB Molecule: activator 1 40 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader2 (replication factor c, rfc) bound to the dna sliding clamp3 (proliferating cell nuclear antigen, pcna)
74	c2z4rB	Alignment	not modelled	99.6	10	PDB header: dna binding protein Chain: B: PDB Molecule: chromosomal replication initiator protein dnaa; PDBTitle: crystal structure of domain iii from the thermotoga2 maritima replication initiation protein dnaa
75	d1sxja2	Alignment	not modelled	99.6	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
76	c1sxjA	Alignment	not modelled	99.6	18	PDB header: replication Chain: A: PDB Molecule: activator 1 95 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader2 (replication factor c, rfc) bound to the dna sliding clamp3 (proliferating cell nuclear antigen, pcna)
77	c1sxjB	Alignment	not modelled	99.5	15	PDB header: replication Chain: B: PDB Molecule: activator 1 37 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader2 (replication factor c, rfc) bound to the dna sliding clamp3

						(proliferating cell nuclear antigen, pcna)
78	c1fnbB_	Alignment	not modelled	99.5	11	PDB header: cell cycle Chain: B: PDB Molecule: cell division control protein 6; PDBTitle: crystal structure of cdc6p from pyrobaculum aerophilum
79	c1iqpF_	Alignment	not modelled	99.5	16	PDB header: replication Chain: F: PDB Molecule: rfcs; PDBTitle: crystal structure of the clamp loader small subunit from2 pyrococcus furiosus
80	c3te6A_	Alignment	not modelled	99.5	15	PDB header: gene regulation Chain: A: PDB Molecule: regulatory protein sir3; PDBTitle: crystal structure of the s. cerevisiae sir3 aaa+ domain
81	d1sxje2	Alignment	not modelled	99.5	11	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
82	d1a5ta2	Alignment	not modelled	99.5	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
83	d1oz4a3	Alignment	not modelled	99.4	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
84	c2v1uA_	Alignment	not modelled	99.4	16	PDB header: replication Chain: A: PDB Molecule: cell division control protein 6 homolog; PDBTitle: structure of the aeropyrum pernix orc1 protein in complex2 with dna
85	d1e94e_	Alignment	not modelled	99.4	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
86	c2kjqA_	Alignment	not modelled	99.4	16	PDB header: replication Chain: A: PDB Molecule: dnna-related protein; PDBTitle: solution structure of protein nmb1076 from neisseria meningitidis.2 northeast structural genomics consortium target mr101b.
87	c2qbyA_	Alignment	not modelled	99.4	13	PDB header: replication/dna Chain: A: PDB Molecule: cell division control protein 6 homolog 1; PDBTitle: crystal structure of a heterodimer of cdc6/orc1 initiators2 bound to origin dna (from s. solfataricus)
88	c1jr3E_	Alignment	not modelled	99.3	16	PDB header: transferase Chain: E: PDB Molecule: dna polymerase iii, delta' subunit; PDBTitle: crystal structure of the processivity clamp loader gamma2 complex of e. coli dna polymerase iii
89	c1w5sB_	Alignment	not modelled	99.3	14	PDB header: replication Chain: B: PDB Molecule: origin recognition complex subunit 2 orc2; PDBTitle: structure of the aeropyrum pernix orc2 protein (adp form)
90	d1gvnb_	Alignment	not modelled	99.3	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Plasmid maintenance system epsilon/zeta, toxin zeta subunit
91	c3m6aC_	Alignment	not modelled	99.2	20	PDB header: hydrolase Chain: C: PDB Molecule: atp-dependent protease la 1; PDBTitle: crystal structure of bacillus subtilis lon c-terminal domain
92	d2gnoa2	Alignment	not modelled	99.2	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
93	c3ec2A_	Alignment	not modelled	99.2	18	PDB header: replication Chain: A: PDB Molecule: dna replication protein dnac; PDBTitle: crystal structure of the dnac helicase loader
94	c2qbyB_	Alignment	not modelled	99.1	10	PDB header: replication/dna Chain: B: PDB Molecule: cell division control protein 6 homolog 3; PDBTitle: crystal structure of a heterodimer of cdc6/orc1 initiators2 bound to origin dna (from s. solfataricus)
95	c2w58B_	Alignment	not modelled	99.0	13	PDB header: hydrolase Chain: B: PDB Molecule: primosome component (helicase loader); PDBTitle: crystal structure of the dnaI
96	c2p5tD_	Alignment	not modelled	98.9	13	PDB header: transcription regulator Chain: D: PDB Molecule: pez2; PDBTitle: molecular and structural characterization of the pezat chromosomal2 toxin-antitoxin system of the human pathogen streptococcus pneumoniae
97	c2gxaA_	Alignment	not modelled	98.8	17	PDB header: replication/dna Chain: A: PDB Molecule: replication protein e1; PDBTitle: crystal structure of papillomavirus e1 hexameric helicase2 with ssdna and mgadp
98	c2qgzA_	Alignment	not modelled	98.7	15	PDB header: hydrolase Chain: A: PDB Molecule: putative primosome component; PDBTitle: crystal structure of a putative primosome component from2 streptococcus pyogenes serotype m3. northeast structural3 genomics target dr58
99	d1svma_	Alignment	not modelled	98.6	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
100	d1tuea_	Alignment	not modelled	98.6	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
101	d1ye8a1	Alignment	not modelled	98.4	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
102	d1lw7a2	Alignment	not modelled	98.4	9	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases

						Family: Nucleotide and nucleoside kinases Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases
103	d2fnaa2	Alignment	not modelled	98.4	15	Family: Extended AAA-ATPase domain PDB header: atp-binding protein
104	c2fnaA_	Alignment	not modelled	98.4	15	Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of an archaeal aaa+ atpase (sso1545) from <i>sulfolobus2 solfataricus</i> p2 at 2.00 a resolution
105	d2i3ba1	Alignment	not modelled	98.3	29	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
106	c2qenA_	Alignment	not modelled	98.3	14	PDB header: unknown function Chain: A: PDB Molecule: walker-type atpase; PDBTitle: the walker-type atpase paby2304 of <i>pyrococcus abyssi</i>
107	c3e1sA_	Alignment	not modelled	98.2	14	PDB header: hydrolase Chain: A: PDB Molecule: exodeoxyribonuclease v, subunit recd; PDBTitle: structure of an n-terminal truncation of <i>deinococcus radiodurans</i> recd2
108	c3b85A_	Alignment	not modelled	98.2	12	PDB header: hydrolase Chain: A: PDB Molecule: phosphate starvation-inducible protein; PDBTitle: crystal structure of predicted phosphate starvation-induced atpase2 phoh2 from <i>corynebacterium glutamicum</i>
109	c2v9pH_	Alignment	not modelled	98.2	16	PDB header: hydrolase Chain: H: PDB Molecule: replication protein e1; PDBTitle: crystal structure of papillomavirus e1 hexameric helicase2 dna-free form
110	d1x6va3	Alignment	not modelled	98.2	11	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Adenosine-5'phosphosulfate kinase (APS kinase)
111	c3iytG_	Alignment	not modelled	98.2	10	PDB header: apoptosis Chain: G: PDB Molecule: apoptotic protease-activating factor 1; PDBTitle: structure of an apoptosome-procaspase-9 card complex
112	c1w36G_	Alignment	not modelled	98.2	15	PDB header: recombination Chain: G: PDB Molecule: exodeoxyribonuclease v alpha chain; PDBTitle: recbcd:dna complex
113	d1w36d1	Alignment	not modelled	98.2	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain
114	c3tlxA_	Alignment	not modelled	98.2	19	PDB header: transferase Chain: A: PDB Molecule: adenylate kinase 2; PDBTitle: crystal structure of pf10_0086, adenylate kinase from <i>plasmodium2 falciparum</i>
115	d1kaga_	Alignment	not modelled	98.2	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Shikimate kinase (AroK)
116	c3trfB_	Alignment	not modelled	98.2	9	PDB header: transferase Chain: B: PDB Molecule: shikimate kinase; PDBTitle: structure of a shikimate kinase (arok) from <i>coxiella burnetii</i>
117	d1e6ca_	Alignment	not modelled	98.2	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Shikimate kinase (AroK)
118	d1g6oa_	Alignment	not modelled	98.1	11	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
119	d1bifa1	Alignment	not modelled	98.0	12	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase, kinase domain
120	c1zuiA_	Alignment	not modelled	98.0	34	PDB header: transferase Chain: A: PDB Molecule: shikimate kinase; PDBTitle: structural basis for shikimate-binding specificity of <i>helicobacter2 pylori</i> shikimate kinase