

Phyre²

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Description	P60584
Date	Thu Jan 5 12:06:55 GMT 2012
Unique Job ID	8e7536a74524153b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2a1tC_			100.0	27	PDB header: oxidoreductase/electron transport Chain: C; PDB Molecule: acyl-coa dehydrogenase, medium-chain specific, PDBTitle: structure of the human mcad:etf e165betaa complex
2	c1rx0B_			100.0	26	PDB header: oxidoreductase Chain: B; PDB Molecule: acyl-coa dehydrogenase family member 8, PDBTitle: crystal structure of isobutyryl-coa dehydrogenase complexed2 with substrate/ligand.
3	c1legcB_			100.0	27	PDB header: electron transfer Chain: B; PDB Molecule: medium chain acyl-coa dehydrogenase; PDBTitle: structure of t255e, e376g mutant of human medium chain acyl-2 coa dehydrogenase complexed with octanoyl-coa
4	c2cx9C_			100.0	29	PDB header: oxidoreductase Chain: C; PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl-coa dehydrogenase
5	c2ix5A_			100.0	25	PDB header: oxidoreductase Chain: A; PDB Molecule: acyl-coenzyme a oxidase 4, peroxisomal; PDBTitle: short chain specific acyl-coa oxidase from arabidopsis2 thaliana, acx4 in complex with acetoacetyl-coa
6	c1ukwA_			100.0	29	PDB header: oxidoreductase Chain: A; PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of medium-chain acyl-coa dehydrogenase2 from thermus thermophilus hb8
7	c2z1qA_			100.0	27	PDB header: oxidoreductase Chain: A; PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl coa dehydrogenase
8	c3owaC_			100.0	26	PDB header: oxidoreductase Chain: C; PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl-coa dehydrogenase complexed with fad from2 bacillus anthracis
9	c2jifA_			100.0	26	PDB header: oxidoreductase Chain: A; PDB Molecule: short/branched chain specific acyl-coa dehydrogenase; PDBTitle: structure of human short-branched chain acyl-coa2 dehydrogenase (acadsb)
10	c2pg0B_			100.0	27	PDB header: oxidoreductase Chain: B; PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl-coa dehydrogenase from geobacillus2 kaustophilus
11	c1vhD_			100.0	28	PDB header: oxidoreductase Chain: D; PDB Molecule: isovaleryl-coa dehydrogenase; PDBTitle: structure of human isovaleryl-coa dehydrogenase at 2.62 angstroms resolution: structural basis for substrate3 specificity

12	c3swoA			100.0	20	PDB header: oxidoreductase Chain: A; PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: crystal structure of a glutaryl-coa dehydrogenase from mycobacterium2 smegmatis in complex with fadh2
13	c2uxwA			100.0	28	PDB header: oxidoreductase Chain: A; PDB Molecule: very-long-chain specific acyl-coa dehydrogenase; PDBTitle: crystal structure of human very long chain acyl-coa2 dehydrogenase (acadvl)
14	c2vigC			100.0	30	PDB header: oxidoreductase Chain: C; PDB Molecule: short-chain specific acyl-coa dehydrogenase,; PDBTitle: crystal structure of human short-chain acyl coa2 dehydrogenase
15	c1bucB			100.0	30	PDB header: oxidoreductase Chain: B; PDB Molecule: butyryl-coa dehydrogenase; PDBTitle: three-dimensional structure of butyryl-coa dehydrogenase from2 megasphaera elsdenii
16	c3sf6A			100.0	24	PDB header: oxidoreductase Chain: A; PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: crystal structure of glutaryl-coa dehydrogenase from mycobacterium2 smegmatis
17	c3r7kB			100.0	26	PDB header: oxidoreductase Chain: B; PDB Molecule: probable acyl coa dehydrogenase; PDBTitle: crystal structure of a probable acyl coa dehydrogenase from2 mycobacterium abscessus atcc 19977 / dsm 44196
18	c1siqA			100.0	22	PDB header: oxidoreductase Chain: A; PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: the crystal structure and mechanism of human glutaryl-coa2 dehydrogenase
19	c3oibB			100.0	26	PDB header: oxidoreductase Chain: B; PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of a putative acyl-coa dehydrogenase from2 mycobacterium smegmatis, iodide soak
20	c3mpjG			100.0	28	PDB header: oxidoreductase Chain: G; PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: structure of the glutaryl-coenzyme a dehydrogenase
21	c3eomD		not modelled	100.0	22	PDB header: oxidoreductase Chain: D; PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: 2.4 a crystal structure of native glutaryl-coa dehydrogenase from2 burkholderia pseudomallei
22	c2dvlB		not modelled	100.0	33	PDB header: oxidoreductase Chain: B; PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of project tt0160 from thermus thermophilus hb8
23	c2ebal		not modelled	100.0	22	PDB header: oxidoreductase Chain: I; PDB Molecule: putative glutaryl-coa dehydrogenase; PDBTitle: crystal structure of the putative glutaryl-coa dehydrogenase from2 thermus thermophilus
24	c3mkhC		not modelled	100.0	19	PDB header: oxidoreductase Chain: C; PDB Molecule: nitroalkane oxidase; PDBTitle: podospora anserina nitroalkane oxidase
25	c3nf4B		not modelled	100.0	27	PDB header: oxidoreductase Chain: B; PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl-coa dehydrogenase from mycobacterium2 thermoresistibile bound to flavin adenine dinucleotide
26	c3pfdB		not modelled	100.0	28	PDB header: oxidoreductase Chain: B; PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of an acyl-coa dehydrogenase from mycobacterium2 thermoresistibile bound to reduced flavin adenine dinucleotide solved3 by combined iodide ion sad mr
27	c2rehD		not modelled	100.0	18	PDB header: oxidoreductase Chain: D; PDB Molecule: nitroalkane oxidase; PDBTitle: mechanistic and structural analyses of the roles of arg4092 and asp402 in the reaction of the flavoprotein nitroalkane3 oxidase
						PDB header: oxidoreductase Chain: A; PDB Molecule: nitroalkane3 oxidase

28	c1r2ja	Alignment	not modelled	100.0	22	Chain: A: PDB Molecule: protein tkd1; PDBTitle: fkbi for biosynthesis of methoxymalonyl extender unit of2 fk520 polyketide immunosupresant
29	c2wbiB	Alignment	not modelled	100.0	20	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase family member 11; PDBTitle: crystal structure of human acyl-coa dehydrogenase 11
30	c3m9vA	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: fad-dependent oxidoreductase; PDBTitle: x-ray structure of a kijd3 in complex with dtdp
31	c2jbtA	Alignment	not modelled	100.0	15	PDB header: oxidoreductase Chain: A: PDB Molecule: p-hydroxyphenylacetate hydroxylase c2:xygenase PDBTitle: structure of the monooxygenase component of p-2 hydroxyphenylacetate hydroxylase from acinetobacter3 baumannii
32	c2or0B	Alignment	not modelled	100.0	15	PDB header: oxidoreductase Chain: B: PDB Molecule: hydroxylase; PDBTitle: structural genomics, the crystal structure of a putative hydroxylase2 from rhodococcus sp. rha1
33	c3djIA	Alignment	not modelled	100.0	24	PDB header: oxidoreductase Chain: A: PDB Molecule: protein aidb; PDBTitle: crystal structure of alkylation response protein e. coli aidb
34	c2rfqA	Alignment	not modelled	100.0	16	PDB header: oxidoreductase Chain: A: PDB Molecule: 3-hsa hydroxylase, oxygenase; PDBTitle: crystal structure of 3-hsa hydroxylase from rhodococcus sp. rha1
35	c2ddhA	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa oxidase; PDBTitle: crystal structure of acyl-coa oxidase complexed with 3-oh-dodecanoate
36	c1w07A	Alignment	not modelled	100.0	19	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa oxidase; PDBTitle: arabidopsis thaliana acyl-coa oxidase 1
37	c2fonA	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: peroxisomal acyl-coa oxidase 1a; PDBTitle: x-ray crystal structure of leacx1, an acyl-coa oxidase from2 lycopersicon esculentum (tomato)
38	c3mxIB	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: B: PDB Molecule: nitrososynthase; PDBTitle: crystal structure of nitrososynthase from micromonospora carbonacea2 var. africana
39	d3mdea2	Alignment	not modelled	100.0	26	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
40	d2d29a2	Alignment	not modelled	100.0	27	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
41	d1rx0a2	Alignment	not modelled	100.0	25	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
42	d1ukwa2	Alignment	not modelled	100.0	27	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
43	d1jqia2	Alignment	not modelled	100.0	26	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
44	d1egda2	Alignment	not modelled	100.0	25	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
45	d1buca2	Alignment	not modelled	100.0	27	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
46	d2c12a2	Alignment	not modelled	100.0	16	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
47	d1ivha2	Alignment	not modelled	100.0	27	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
48	d1siqa2	Alignment	not modelled	100.0	18	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
49	d1r2ja2	Alignment	not modelled	100.0	21	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
50	c3hwcd	Alignment	not modelled	100.0	13	PDB header: oxidoreductase Chain: D: PDB Molecule: chlorophenol-4-monoxygenase component 2; PDBTitle: crystal structure of chlorophenol 4-monoxygenase (tfld) of2 burkholderia cepacia ac1100
51	d2ddha3	Alignment	not modelled	100.0	17	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: acyl-CoA oxidase N-terminal domains
52	d1w07a3	Alignment	not modelled	100.0	21	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: acyl-CoA oxidase N-terminal domains
53	c2yyja	Alignment	not modelled	100.0	12	PDB header: oxidoreductase Chain: A: PDB Molecule: 4-hydroxyphenylacetate-3-hydroxylase; PDBTitle: crystal structure of the oxygenase component (hpab) of

						4-2 hydroxyphenylacetate 3-monoxygenase complexed with fad and 4-3 hydroxyphenylacetate
54	c1u8vA_	Alignment	not modelled	100.0	15	PDB header: lyase, isomerase Chain: A; PDB Molecule: gamma-aminobutyrate metabolism PDBTitle: crystal structure of 4-hydroxybutyryl-coa dehydratase from2 clostridium aminobutyricum: radical catalysis involving a3 [4fe-4s] cluster and flavin
55	d3mdea1	Alignment	not modelled	100.0	29	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
56	d1qjg1	Alignment	not modelled	100.0	32	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
57	d1egda1	Alignment	not modelled	100.0	31	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
58	d1siga1	Alignment	not modelled	100.0	24	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
59	d1ivha1	Alignment	not modelled	100.0	29	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
60	d1bucal	Alignment	not modelled	100.0	34	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
61	d2d29a1	Alignment	not modelled	100.0	32	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
62	d1rx0a1	Alignment	not modelled	100.0	26	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
63	d1ukwa1	Alignment	not modelled	100.0	32	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
64	d2c12a1	Alignment	not modelled	99.9	20	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
65	d2ddha1	Alignment	not modelled	99.9	19	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: acyl-CoA oxidase C-terminal domains
66	d1w07a1	Alignment	not modelled	99.9	16	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: acyl-CoA oxidase C-terminal domains
67	d1r2ja1	Alignment	not modelled	99.9	25	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
68	d1u8va2	Alignment	not modelled	99.8	16	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
69	d1u8val	Alignment	not modelled	96.2	12	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
70	d1jhfa1	Alignment	not modelled	24.9	26	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: LexA repressor, N-terminal DNA-binding domain
71	c3kxeD_	Alignment	not modelled	22.0	20	PDB header: protein binding Chain: D; PDB Molecule: antitoxin protein pard-1; PDBTitle: a conserved mode of protein recognition and binding in a2 pard-pard toxin-antitoxin complex
72	c3aqnA_	Alignment	not modelled	19.0	16	PDB header: transferase Chain: A; PDB Molecule: poly(a) polymerase; PDBTitle: complex structure of bacterial protein (apo form ii)
73	c2v79B_	Alignment	not modelled	18.9	14	PDB header: dna-binding protein Chain: B; PDB Molecule: dna replication protein dnad; PDBTitle: crystal structure of the n-terminal domain of dnad from2 bacillus subtilis
74	c2pjpa_	Alignment	not modelled	12.4	17	PDB header: translation/rna Chain: A; PDB Molecule: selenocysteine-specific elongation factor; PDBTitle: structure of the mrna-binding domain of elongation factor2 selb from e.coli in complex with secis rna
75	c1oizA_	Alignment	not modelled	11.2	24	PDB header: transport Chain: A; PDB Molecule: alpha-tocopherol transfer protein; PDBTitle: the molecular basis of vitamin e retention: structure of2 human alpha-tocopherol transfer protein
76	d1lvaas3	Alignment	not modelled	10.7	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: C-terminal fragment of elongation factor SelB
77	d1rr7a_	Alignment	not modelled	10.7	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Middle operon regulator, Mor
78	c1rr7A_	Alignment	not modelled	10.7	22	PDB header: transcription Chain: A; PDB Molecule: middle operon regulator; PDBTitle: crystal structure of the middle operon regulator protein of2 bacteriophage mu

79	d1r5la2		Alignment	not modelled	10.6	24	Fold: Spollaa-like Superfamily: CRAL/TRIO domain Family: CRAL/TRIO domain
80	c1yx3A_		Alignment	not modelled	10.4	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein dsrc; PDBTitle: nmr structure of allochromatium vinosum dsrc: northeast2 structural genomics consortium target op4
81	d1w96a2		Alignment	not modelled	10.2	17	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
82	d1xsqa_		Alignment	not modelled	10.1	20	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Uridoglycolate hydrolase AllA
83	d2bdra1		Alignment	not modelled	10.1	22	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Uridoglycolate hydrolase AllA
84	c2a5wC_		Alignment	not modelled	10.1	12	PDB header: oxidoreductase Chain: C: PDB Molecule: sulfite reductase, desulfovirodin-type subunit gamma PDBTitle: crystal structure of the oxidized gamma-subunit of the dissimilatory2 sulfite reductase (dsrc) from archaeoglobus fulgidus
85	c3c3jA_		Alignment	not modelled	9.5	13	PDB header: isomerase Chain: A: PDB Molecule: putative tagatose-6-phosphate ketose/aldose isomerase; PDBTitle: crystal structure of tagatose-6-phosphate ketose/aldose isomerasefrom2 escherichia coli
86	d2yoa1		Alignment	not modelled	9.1	14	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
87	d1ulza2		Alignment	not modelled	8.4	11	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
88	d1ji8a_		Alignment	not modelled	7.9	13	Fold: DsrC, the gamma subunit of dissimilatory sulfite reductase Superfamily: DsrC, the gamma subunit of dissimilatory sulfite reductase Family: DsrC, the gamma subunit of dissimilatory sulfite reductase
89	c2kngA_		Alignment	not modelled	7.6	19	PDB header: dna binding protein Chain: A: PDB Molecule: protein lsr2; PDBTitle: solution structure of c-domain of lsr2
90	d1y9ba1		Alignment	not modelled	7.1	11	Fold: Ribbon-helix-helix Superfamily: Ribbon-helix-helix Family: VCA0319-like
91	d2v4jc1		Alignment	not modelled	7.1	4	Fold: DsrC, the gamma subunit of dissimilatory sulfite reductase Superfamily: DsrC, the gamma subunit of dissimilatory sulfite reductase Family: DsrC, the gamma subunit of dissimilatory sulfite reductase
92	d2j9ga2		Alignment	not modelled	7.0	14	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
93	d1c9ka_		Alignment	not modelled	6.8	41	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
94	d1stza1		Alignment	not modelled	6.8	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Heat-inducible transcription repressor HrcA, N-terminal domain
95	c1wsuA_		Alignment	not modelled	6.7	13	PDB header: translation/rna Chain: A: PDB Molecule: selenocysteine-specific elongation factor; PDBTitle: c-terminal domain of elongation factor selb complexed with2 secis rna
96	c2zs6B_		Alignment	not modelled	5.9	13	PDB header: toxin Chain: B: PDB Molecule: hemagglutinin components ha3; PDBTitle: ha3 subcomponent of botulinum type c progenitor toxin
97	d1vfga1		Alignment	not modelled	5.6	12	Fold: Poly A polymerase C-terminal region-like Superfamily: Poly A polymerase C-terminal region-like Family: Poly A polymerase C-terminal region-like
98	c3c1IB_		Alignment	not modelled	5.5	29	PDB header: oxidoreductase Chain: B: PDB Molecule: putative antioxidant defense protein mlr4105; PDBTitle: crystal structure of an antioxidant defense protein (mlr4105) from2 mesorhizobium loti maff303099 at 2.00 a resolution
99	c3gkaB_		Alignment	not modelled	5.5	25	PDB header: oxidoreductase Chain: B: PDB Molecule: n-ethylmaleimide reductase; PDBTitle: crystal structure of n-ethylmaleimidine reductase from2 burkholderia pseudomallei