

## Recognition of estradiol binding sites by searching the ASTRAL dataset.

The Table presents a list of proteins (top 400) whose binding sites were recognized to be similar to the estradiol binding site of the sex hormone-binding globulin (1lhu). The proteins are listed in order of decreasing similarity to the query binding site.

Rank	PDB code	Match Score	t-score	p-value	SCOP Family	SCOP Remarks
1	1lhuA	100	203	0.02	49944	complexed with ca, est
2	1d2sA	66	122	0.80	49944	complexed with ca, dht
3	1p4tA	57	101	1.01	56926	complexed with cxe, eta, so4
4	1ad2	55	96	1.05	56809	complexed with hg, mpd, so4; mutant
5	1lfpA	52	89	1.12	75626	structural genomics
6	1fx8A	52	89	1.12	56895	complexed with bog, cry
7	1otsA	50	84	1.17	69912	None
8	1n7dA	50	84	1.17	63826	complexed with ca, keg, man, nag; mutant
9	1fbvA	50	84	1.17	47547	complexed with so4, zn
10	1fepA	50	84	1.17	56948	None
11	1aky	50	84	1.17	52541	complexed with ap5, imd
12	1mdbA	50	84	1.17	56802	complexed with amp, dbh, so4
13	1k8tA	50	84	1.17	69887	complexed with ni, so4
14	1fk5A	49	82	1.19	47700	complexed with fmt, ola
15	1kmoA	49	82	1.19	56948	complexed with hto, lda
16	1m4uA	49	82	1.19	82904	complexed with nag
17	1j4nA	49	82	1.19	56895	complexed with bng
18	1ewfA	49	82	1.19	55395	None
19	1d6gA	48	79	1.21	57643	complex with cholecystokinin-8
20	1ehkA	47	77	1.23	81441	complexed with 1cu, bng, cua, has, hem
21	1sco	47	77	1.23	57116	None
22	2por	47	77	1.23	56936	complexed with ca, ote
23	1kb4B	47	77	1.23	57721	complexed with zn
24	1daaA	47	77	1.23	56753	None
25	1k81A	47	77	1.23	75690	complexed with zn
26	1kpgA	47	77	1.23	69560	None
27	1k8bA	46	74	1.26	75690	None
28	1k24A	46	74	1.26	75651	complexed with 1pe, zn
29	1i7dA	46	74	1.26	56713	complexed with cl, so4; mutant
30	1ktjA	46	74	1.26	81287	None
31	1qubA	46	74	1.26	57536	None
32	1n12A	46	74	1.26	49405	None
33	1lznB	46	74	1.26	90100	None
34	1n46A	46	74	1.26	48509	None
35	19hcA	46	74	1.26	48696	None
36	1skz	46	74	1.26	57263	None
37	1bgxT	46	74	1.26	47808	None
38	1pce	46	74	1.26	57468	None

39	1aquA	46	74	1.26	52575	None
40	1rgs	46	74	1.26	51210	None
41	1jyA	45	72	1.28	64514	complexed with nfs, sf4
42	1m0kA	45	72	1.28	81319	K intermediate
43	1et0A	45	72	1.28	56753	complexed with plp
44	2ae2A	45	72	1.28	51751	None
45	1kq3A	45	72	1.28	69892	structural genomics
46	1by5A	45	72	1.28	56948	complexed with c8e, fe, orn
47	1nuuA	45	72	1.28	90090	None
48	1dd9A	45	72	1.28	56732	complexed with sr
49	1d3yA	45	72	1.28	56727	None
50	1f81A	45	72	1.28	57934	TAZ2 domain (also CH3 domain)
51	1miwA	45	72	1.28	81892	None
52	1mkiA	45	72	1.28	90084	None
53	1h29A	45	72	1.28	48696	None
54	1h2sA	45	72	1.28	81319	None
55	1cixA	45	72	1.28	57072	None
56	1qjpA	45	72	1.28	56926	complexed with c8e; mutant
57	1ibiA	45	72	1.28	57736	None
58	1cc1L	45	72	1.28	56763	complexed with cse, fco, fe2, fs4, h2s, ni
59	1jgkA	45	72	1.28	57303	None
60	1i26A	45	72	1.28	69930	None
61	1i19A	45	72	1.28	64284	None
62	1lv2A	45	72	1.28	48509	complexed with plm
63	1g4yB	45	72	1.28	81326	gating domain in complex with calmodulin
64	2cy3	45	72	1.28	48696	complexed with hem
65	1ky9B	45	72	1.28	74933	None
66	1mkyA	45	72	1.28	52592	None
67	1eskA	45	72	1.28	57757	complexed with zn
68	1qkmA	44	70	1.30	48509	complex with partial agonist genistein
69	1ekfA	44	70	1.30	56753	None
70	1jm7A	44	70	1.30	57851	heterodimer with bard1 RING domain
71	1k0rA	44	70	1.30	50282	None
72	1pme	44	70	1.30	88854	complexed with 577, so4; mutant
73	1iymA	44	70	1.30	57851	complexed with zn
74	1mt5A	44	70	1.30	75305	None
75	1qovM	44	70	1.30	81482	None
76	1yujA	44	70	1.30	57668	protein/DNA complex; complexed with zn
77	1qorA	44	70	1.30	50136	None
78	1trb	44	70	1.30	51943	None
79	1imt	44	70	1.30	57191	None
80	1n5uA	44	70	1.30	48553	None
81	1lfo	44	70	1.30	50847	complexed with ace, beo, ola, unx
82	1n9lA	44	70	1.30	88853	complexed with fmn, sul
83	1p3dA	44	70	1.30	51985	None

84	1f1eA	44	70	1.30	47129	complexed with cl
85	1duvG	44	70	1.30	53672	None
86	1aocA	44	70	1.30	57531	None
87	1hd1A	44	70	1.30	69960	domain 1
88	1l8cA	44	70	1.30	57934	TAZ1 domain; complexed with the C-terminal activation domain (CTAD) of human HIF-1alpha (chain B)
89	1h1b	44	70	1.30	46463	complexed with hem
90	1eulA	44	70	1.30	81652	complexed with ca
91	1gx1A	44	70	1.30	69766	None
92	1nqeA	44	70	1.30	56948	complexed with c8e, mg
93	1h7sA	44	70	1.30	54224	None
94	1lpvA	44	70	1.30	82928	complexed with zn
95	1fgjA	44	70	1.30	48711	None
96	1je0A	43	67	1.33	53168	None
97	1mgpA	43	67	1.33	82550	structural genomics
98	1kbiA	43	67	1.33	51396	complexed with fmn, hem, mpd, po4, pyr
99	1kzkA	43	67	1.33	50631	None
100	1hulA	43	67	1.33	47286	None
101	1kssA	43	67	1.33	48711	complexed with fad, fum, hem, na; mutant
102	1hy9A	43	67	1.33	64547	C-terminal domain
103	2tbvA	43	67	1.33	88643	None
104	1mo9A	43	67	1.33	51943	None
105	1dciA	43	67	1.33	52103	None
106	1dxcC	43	67	1.33	48707	complexed with bcb, bpb, fe2, hec, lda, mq9, mst, ns5, so4; mutant
107	1irdA	43	67	1.33	46463	complexed with cmo, hem
108	4fiv	43	67	1.33	50631	complexed with 1ni
109	1bi5A	43	67	1.33	53914	None
110	1iycA	43	67	1.33	90179	None
111	1iknD	43	67	1.33	48404	None
112	2bi6H	43	67	1.33	57244	None
113	1gqeA	43	67	1.33	75621	complexed with mse; mutant
114	1jchA	43	67	1.33	63841	None
115	1n87A	43	67	1.33	90222	None
116	1qbkB	43	67	1.33	48372	complexed with gnp, mg
117	1dj7A	43	67	1.33	57663	None
118	1ie9A	43	67	1.33	48509	complexed with vdx
119	1bif	43	67	1.33	52589	complexed with atg, gol, mg, po4; mutant
120	1n4yA	43	67	1.33	57553	refined solution structure
121	1i5nA	43	67	1.33	63512	None
122	3lkfA	43	67	1.33	56960	complexed with poc
123	1crb	43	67	1.33	50847	complexed with cd, rtl
124	1e8rA	43	67	1.33	57616	None
125	1ky9A	43	67	1.33	74933	None

126	1hh1A	43	67	1.33	64080	None
127	1e79D	43	67	1.33	47918	None
128	1qkrA	43	67	1.33	47221	None
129	1dxgA	43	67	1.33	57813	None
130	1tgsI	43	67	1.33	57468	complexed with ca, so4
131	1io7A	43	67	1.33	48265	None
132	1bmr	43	67	1.33	57096	complexed with nh2
133	1ly2A	43	67	1.33	57536	None
134	1gegA	43	67	1.33	51751	None
135	1ni4B	43	67	1.33	88741	None
136	1kv3A	43	67	1.33	81289	None
137	1ewsA	43	67	1.33	57393	None
138	1m1qA	43	67	1.33	48711	complexed with hem, sul
139	2sn3	43	67	1.33	57096	complexed with mpd
140	1g2nA	43	67	1.33	48509	complexed with eph
141	1jksA	43	67	1.33	88854	None
142	1n8vA	43	67	1.33	81898	None
143	1tyfA	43	67	1.33	52097	None
144	1qkyA	43	67	1.33	57116	None
145	1fv5A	43	67	1.33	57697	the first zinc finger
146	1c0vA	42	65	1.35	81332	None
147	1jpzA	42	65	1.35	48265	None
148	1okeA	42	65	1.35	81284	None
149	1d3gA	42	65	1.35	51396	complexed with act, bre, ddq, fmn, oro, so4
150	1jkmA	42	65	1.35	53487	None
151	1j9lA	42	65	1.35	64168	None
152	1g29l	42	65	1.35	50338	None
153	1qqqA	42	65	1.35	55832	complexed with so4; mutant
154	1c52	42	65	1.35	46627	complexed with hem
155	1e32A	42	65	1.35	50708	complexed with adp
156	1g25A	42	65	1.35	57851	complexed with zn
157	1qj8A	42	65	1.35	56926	complexed with c8e, pcl; mutant
158	1n1eA	42	65	1.35	48197	None
159	4mt2	42	65	1.35	57869	Two domains (1-32;33-61)
160	1tgoA	42	65	1.35	53118	None
161	2rspA	42	65	1.35	50631	None
162	1extA	42	65	1.35	57587	None
163	1e8xA	42	65	1.35	48399	complexed with atp, lu; mutant
164	1apj	42	65	1.35	57582	None
165	1qo7A	42	65	1.35	53525	None
166	2gdm	42	65	1.35	46463	complexed with hem, oxy
167	1guzA	42	65	1.35	51848	None
168	1n97A	42	65	1.35	48265	None
169	3prn	42	65	1.35	56936	complexed with c8e, mg; mutant
170	1koiA	42	65	1.35	50815	complexed with hem, nmo
171	1a28A	42	65	1.35	48509	None
172	1mx1A	42	65	1.35	53475	None

173	1jqnA	42	65	1.35	51632	complexed with asp, dco, mn
174	1hx2A	42	65	1.35	57577	None
175	1mqSA	42	65	1.35	56816	complexed with an N-terminal peptide of sed5p, chain B
176	1l3lA	42	65	1.35	46900	None
177	1g10A	42	65	1.35	56030	None
178	1ncs	42	65	1.35	57668	domain 1; has an extension to the common fold at the N-terminus
179	1e88A	42	65	1.35	57459	None
180	1gwiA	42	65	1.35	48265	None
181	2bds	42	65	1.35	57393	None
182	1nstA	42	65	1.35	52575	complexed with a3p
183	1nrwA	42	65	1.35	82388	structural genomics
184	1co4A	42	65	1.35	57880	complexed with zn
185	1f8rA	42	65	1.35	51913	None
186	1o6yA	42	65	1.35	88854	complexed with acp, mg
187	1fnoA	42	65	1.35	53204	complexed with mse, so4, zn2
188	1lriA	42	65	1.35	48648	complexed with cholesterol
189	1a9xA	42	65	1.35	48109	None
190	1fbnA	42	65	1.35	53342	structural genomics
191	1nni1	42	65	1.35	89590	structural genomics
192	1ln1A	42	65	1.35	55966	complexed with dlp
193	1f35A	42	65	1.35	63698	None
194	1cz4A	42	65	1.35	50708	None
195	1gknA	42	65	1.35	57536	None
196	1m0gA	42	65	1.35	57869	alpha domain
197	1kl7A	42	65	1.35	53687	None
198	1oahA	42	65	1.35	48711	None
199	1ica	42	65	1.35	57163	None
200	1k3pA	42	65	1.35	48257	None
201	1cd1A	42	65	1.35	48942	None
202	1jjuA	42	65	1.35	68956	None
203	1hxxA	42	65	1.35	56936	complexed with c8e; mutant
204	1couA	42	65	1.35	57568	None
205	1dguA	42	65	1.35	47502	None
206	1em2A	42	65	1.35	55966	complexed with tar; mutant
207	1lr7A	42	65	1.35	57236	complexed with so4
208	1ltxR	42	65	1.35	51931	complexed with cl, far, zn2; mutant
209	1p4oA	42	65	1.35	88854	None
210	1jj2R	42	65	1.35	54190	complexed with cd, cl, k, mg, na
211	1vns	42	65	1.35	48325	complexed with so4
212	1e3hA	42	65	1.35	46916	complexed with so4
213	1m0jA	42	65	1.35	57869	beta domain
214	1fmb	42	65	1.35	50631	complexed with hyb; mutant
215	1tfi	42	65	1.35	57784	complexed with zn
216	1edoA	42	65	1.35	51751	complexed with nap
217	1hdj	42	65	1.35	46566	None
218	1ne5A	42	65	1.35	57116	None

219	1ebfA	42	65	1.35	51800	None
220	1bu6O	42	65	1.35	53089	None
221	1p16A	42	65	1.35	50307	None
222	1n8lA	42	65	1.35	47337	None
223	1c75A	42	65	1.35	46627	complexed with hem
224	1gyoA	42	65	1.35	48696	None
225	1lldA	42	65	1.35	51848	None
226	1f62A	42	65	1.35	57911	complexed with zn
227	1zfyA	42	65	1.35	51413	contains two CBS domains inserted into the common fold
228	1i8nA	42	65	1.35	64556	None
229	1fmcA	42	65	1.35	51751	None
230	1iz5A	41	63	1.37	55983	None
231	1h2kA	41	63	1.37	82194	complex with HIF-1 alpha fragment peptide
232	1kt7A	41	63	1.37	50815	complexed with rtl
233	1jnrA	41	63	1.37	46978	None
234	1h5oA	41	63	1.37	90157	None
235	1l8aA	41	63	1.37	88735	None
236	1cx4A	41	63	1.37	51210	None
237	1f45B	41	63	1.37	47267	complexed with man, nag; mutant
238	1ksfX	41	63	1.37	81924	complexed with adp, ioh, met, mg, pge; mutant
239	1cb0A	41	63	1.37	53168	complexed with ade; mutant
240	1mxtA	41	63	1.37	51913	atomic resolution structure
241	1lshA	41	63	1.37	48432	complexed with pca, pld, upl
242	1h32A	41	63	1.37	81677	None
243	1crzA	41	63	1.37	50961	None
244	2sqcA	41	63	1.37	48243	None
245	1ecrA	41	63	1.37	56597	protein/DNA complex
246	1gzqA	41	63	1.37	48942	complexed with d12, no3, pii, twt
247	1htjF	41	63	1.37	48098	mutant
248	1bmtA	41	63	1.37	47645	None
249	1kagA	41	63	1.37	52566	None
250	1pyiA	41	63	1.37	57702	None
251	1oyb	41	63	1.37	51396	complexed with fmn, hba
252	1iktA	41	63	1.37	55719	complexed with oxn, so4
253	3cyr	41	63	1.37	48696	complexed with hem
254	1p4xA	41	63	1.37	63379	None
255	1gr0A	41	63	1.37	51800	complexed with cac, nad, zn
256	1d0cA	41	63	1.37	56513	None
257	1dqwA	41	63	1.37	51375	None
258	1lqaA	41	63	1.37	51431	None
259	1fo4A	41	63	1.37	47742	None
260	1pk5A	41	63	1.37	48509	None
261	1ezvD	41	63	1.37	46676	complexed with fes, hem, sma, uq6
262	1klfB	41	63	1.37	49405	None
263	1b63A	41	63	1.37	54224	complexed with anp, edo, mg

264	1gph1	41	63	1.37	53272	None
265	1psuA	41	63	1.37	89902	None
266	1n91A	41	63	1.37	69787	structural genomics
267	1ojt	41	63	1.37	51943	None
268	1kdgA	41	63	1.37	51913	None
269	1de4C	41	63	1.37	47673	None
270	451c	41	63	1.37	46627	complexed with hem
271	451c	41	63	1.37	46627	complexed with hem
272	1c4xA	41	63	1.37	53522	None
273	1omwA	41	63	1.37	48098	complexed with cmt; mutant
274	1n0uA	41	63	1.37	50448	complexed with so1
275	1jm6A	41	63	1.37	69013	None
276	1g7sA	41	63	1.37	50448	None
277	1k8kA	41	63	1.37	53068	None
278	1adt	41	63	1.37	47725	complexed with zn
279	1isuA	41	63	1.37	57653	None
280	1myn	41	63	1.37	57163	None
281	2hpgP	41	63	1.37	57441	complexed with ch2
282	1nbjA	41	63	1.37	57042	by homology with Kalata, in the precursor, the mature protein sequence probably begins at Gly28 and ends at Asn27
283	1hqsA	41	63	1.37	53660	None
284	1csh	41	63	1.37	48257	complexed with amx, oaa
285	1kn0A	41	63	1.37	82645	None
286	1k8mA	41	63	1.37	51231	None
287	1ivyA	41	63	1.37	53499	None
288	1o97D	41	63	1.37	52432	complexed with amp, fad
289	1l7dA	41	63	1.37	51830	None
290	1e8cA	41	63	1.37	63419	None
291	1vpu	41	63	1.37	57648	mutant
292	1bik	41	63	1.37	57363	None
293	1h6vA	41	63	1.37	51943	None
294	1mzpA	41	63	1.37	56809	complex with a 23S rRNA fragment
295	1n62B	41	63	1.37	54666	None
296	1lmjA	41	63	1.37	57197	None
297	3btaA	41	63	1.37	49956	complexed with zn
298	1hh5A	41	63	1.37	48696	complexed with hec
299	1b6cB	41	63	1.37	88854	None
300	1kk6A	41	63	1.37	51168	None
301	1i8oA	41	63	1.37	46627	complexed with hec, nh3, sul
302	1ew0A	41	63	1.37	55789	complexed with hem
303	1bx7	41	63	1.37	57263	complexed with so4
304	1cydA	41	63	1.37	51751	None
305	1jlzA	41	63	1.37	57116	None
306	1iuuA	41	63	1.37	57653	complexed with fs4, so4
307	2prgA	41	63	1.37	48509	None
308	4bcl	41	63	1.37	51082	complexed with bcl

309	1ji0A	41	63	1.37	52686	complexed with atp, mse
310	1aqe	41	63	1.37	48696	complexed with hem, so4; mutant
311	1fp2A	41	63	1.37	63475	complexed with hmo, sah
312	1cvuA	41	63	1.37	48132	None
313	1jymA	41	63	1.37	56421	None
314	1bdb	41	63	1.37	51751	complexed with nad
315	1n08A	41	63	1.37	82115	None
316	1fgkA	41	63	1.37	88854	None
317	1iw4A	41	63	1.37	57468	None
318	1iy8A	41	63	1.37	51751	None
319	1l7vC	40	60	1.39	52686	None
320	1f5nA	40	60	1.39	48341	complexed with gnp, mg; mutant
321	4htcI	40	60	1.39	57270	complexed with nag
322	1nvrA	40	60	1.39	88854	complex with peptide, chain B
323	1kx5C	40	60	1.39	47114	None
324	1dec	40	60	1.39	57270	None
325	1etpA	40	60	1.39	46680	None
326	1gsoA	40	60	1.39	51247	mutant
327	1kvkA	40	60	1.39	54232	complexed with atp, mg
328	1roo	40	60	1.39	57547	None
329	2bbg	40	60	1.39	57297	None
330	1ffyA	40	60	1.39	47324	protein/RNA complex; complexed with k, mo2, mo4, mo5, mo6, mrc, zn
331	1efuB	40	60	1.39	63423	None
332	1aozA	40	60	1.39	49550	None
333	1n3lA	40	60	1.39	52375	mini-TyrRS; anticodon recognition part is more divergent; secreted cytokine with IL-8-like activity
334	1j3bA	40	60	1.39	53796	None
335	1i25A	40	60	1.39	57072	None
336	1o8bA	40	60	1.39	75176	None
337	1o8bA	40	60	1.39	75176	None
338	1n6bA	40	60	1.39	48265	complexed with dmz, hem, so4
339	1dn0B	40	60	1.39	48727	None
340	1g13A	40	60	1.39	63708	None
341	1obbA	40	60	1.39	51848	None
342	1kv9A	40	60	1.39	68952	complexed with acn, ca, epe, gol, hem, pqq
343	1ajsA	40	60	1.39	53384	None
344	1bx4A	40	60	1.39	53614	complexed with adn, cl, mo4, mo6
345	1qupA	40	60	1.39	49330	None
346	1df0A	40	60	1.39	63550	mutant
347	1k30A	40	60	1.39	69594	None
348	1in4A	40	60	1.39	46819	complexed with act, adp, co, hez
349	1l8wA	40	60	1.39	74749	None
350	1ehyA	40	60	1.39	53525	None
351	1kcp	40	60	1.39	57060	complexed with nh2
352	3ladA	40	60	1.39	51943	None



353	1kqhA	40	60	1.39	57072	None
354	1dbhA	40	60	1.39	48066	None
355	1lqrA	40	60	1.39	57072	None
356	1m5wA	40	60	1.39	63893	None
357	1bxdA	40	60	1.39	55884	complexed with anp
358	1epuA	40	60	1.39	56816	None
359	1jkzA	40	60	1.39	57170	None
360	1lqvA	40	60	1.39	54453	None
361	1faq	40	60	1.39	57890	complexed with zn
362	1b16A	40	60	1.39	51751	None
363	1bndA	40	60	1.39	57520	heterodimer with NT3
364	1befA	40	60	1.39	50596	None
365	1afp	40	60	1.39	57599	None
366	1jp3A	40	60	1.39	64006	None
367	1c4eA	40	60	1.39	57049	None
368	1gvhA	40	60	1.39	46463	complexed with cl, fad, hem, na
369	1gg4A	40	60	1.39	63419	None
370	1jmxA	40	60	1.39	68956	None
371	1nm3A	40	60	1.39	52834	None
372	1dqeA	40	60	1.39	47566	None
373	1hbkA	40	60	1.39	47028	complexed with coa, myr, ni
374	1npyA	40	60	1.39	51883	None
375	1g9gA	40	60	1.39	48213	complexed with ca, mg
376	1ezvA	40	60	1.39	63412	None
377	1g8eA	40	60	1.39	63593	None
378	1hykA	40	60	1.39	57056	None
379	1paa	40	60	1.39	57668	C-terminal domain
380	1fs0G	40	60	1.39	52944	complexed to the epsilon subunit; the coiled-coil part is disordered
381	1fhjB	40	60	1.39	46463	None
382	1iw7C	40	60	1.39	64485	None
383	1m0wA	40	60	1.39	52460	None
384	1uxy	40	60	1.39	56184	complexed with epu, fad; mutant
385	1dc1A	40	60	1.39	53011	None
386	1d6bA	40	60	1.39	57393	None
387	1lkxA	40	60	1.39	52641	None
388	1dtx	40	60	1.39	57363	complexed with so4
389	1tubB	40	60	1.39	52491	complexed with gdp, gtp, txl
390	1aoa	40	60	1.39	47577	None
391	1nkvA	40	60	1.39	82469	None
392	1m6nA	40	60	1.39	81768	complexed with so4
393	1m6nA	40	60	1.39	81768	complexed with so4
394	1h0hA	40	60	1.39	50696	None
395	1h1oA	40	60	1.39	46680	None
396	1ihkA	40	60	1.39	50354	complexed with po4
397	1mj3A	40	60	1.39	52103	None
398	1dzkA	40	60	1.39	50815	None
399	1kthA	40	60	1.39	57363	complexed with po4

400	1cnoA	40	60	1.39	46627	None
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