

SUPPLEMENTAL TABLE S2: SUMMARY OF EPO- MODULATED GENES WITHIN K-MEANS CLUSTERS #1 - #4, INCLUDING CANDIDATE TRANSCRIPTION FACTOR BINDING SITES (as predicted via DiRE).

CLUSTER 4 EPO RESPONSE GENES

#	Regulatory element	Type	Score	Locus	Gene	Candidate transcription factor binding sites (relative positions)
1	chr10:94880055-94880493	promoter	0.406	chr10:94786738-94943373	Socs2	6 :: WT1(96) ZF5(216) AREB6(224) RORA2(415) RORA1(431) RORA2(431) 42 :: R(61) NF1(81) R(90) AML(97) TAL1ALPHA47(112) TAL1BETAE47(112) PAX6(155) SMAD4(168) SREBP(303) AML(325) VBP(332) CREBATF(333) ROAZ(340) EGR1(341) NGFIC(341) TAXCREB(354) PAX6(358) RORA1(358) IRF7(372) STAT5B(374) ZF5(393) ZF5(414) NANOG(418) ACAAT(422) CDP(443) RORA1(449) SREBP(452) P53_DECAMER(454) UF1H3BETA(477) ZNF219(479) MZF1(481) UF1H3BETA(483) WT1(483) ZNF219(486) MZF1(487) UF1H3BETA(488) CACD(492) SPZ1(495) HOXA7(517) SPZ1(520) SMAD4(542) TAXCREB(575)
2	chr11:4136272-4136885	UTR5	0.000	chr11:4122426-4157560	Osm	
3	chr11:117831309-117831444	promoter	0.225	chr11:117734826-117848170	Socs3	1 :: ZF5(90)
4	chr12:105415954-105416340	intergenic	0.126	chr12:105392117-105480144	Serpina3f, Serpina3g	3 :: LMO2COM(114) GCNF(153) STAT6(300)
5	chr15:61815830-61816035	promoter	1.072	chr15:60817091-62821892	Myc	3 :: STAT6(4) UF1H3BETA(22) TAXCREB(129)
6	chr18:35729880-35731677	UTR5	0.000	chr18:35658523-35758318	Matr3	36 :: CRX(92) P53_DECAMER(131) CDP(338) ACAAT(347) CDPCR1(356) AREB6(856) AIRE(862) STAT6(863) CIZ(879) OCT4(1051) XFD1(1127) GFI1(1136) NKX61(1143) MRF2(1189) HNF4_DR1(1207) OCT4(1213) CMAF(1217) PAX6(1221) RORA1(1221) RORA2(1221) GFI1(1222) GCNF(1222) ZEC(1351) NFKAPPAB65(1396) NFKAPPAB(1396) VMAF(1452) AFP1(1487) CEBPGAMMA(1528) MMEF2(1608) DR3(1662) CDPCR1(1664) CDP(1665) AIRE(1669) RORA2(1707) CDP(1768) MMEF2(1774)
7	chr2:32816491-32816655	promoter	0.001	chr2:32815708-32828498	Rpl12	2 :: CACD(35) NFKAPPAB50(91)
8	chr2:119176884-119177138	UTR5	0.001	chr2:119161397-119198772	Chac1	22 :: FXR(34) E2F1DP2(54) MZF1(58) CACD(58) UF1H3BETA(60) MYOGENIN(76) E47(77) LMO2COM(77) AP4(77) TAL1(77) ZF5(123) MINI19(138) MINI20(138) AP4(143) PAX6(145) PAX6(164) EBOX(170) MYOGENIN(170) AREB6(171) LMO2COM(171) E47(172) ZF5(197)
9	chr2:152163094-152163464	UTR3	0.857	chr2:152158388-152192540	Trib3	2 :: R(237) NF1(344)
10	chr3:50394274-50395813	intergenic	0.000	chr3:50247543-51059575	Ccrn4l	29 :: XPF1(97) NKX61(135) IRF7(152) ISRE(153) NFAT(157) FOXJ2(226) CDP(319) TAL1ALPHA47(369) TAL1BETAE47(369) XPF1(474) LEF1TCF1(549) TBP(938) AREB6(987) HAND1E47(1012) GZF1(1068) MYOGENIN(1113) ALX4(1168) RSRFC4(1190) CHOP(1207) OCT4(1261) FOXJ2(1295) T3R(1352) IK1(1357) RORA2(1373) HOXA4(1375) NKX62(1376) FXR(1403) LHX3(1481) AFP1(1483)
11	chr6:31731002-31731975	intergenic	0.000	chr6:31459491-32000233	Podxl	25 :: PAX6(15) FOXJ2(184) IRF7(190) STAT4(194) STAT5B(198) CDP(201) LMO2COM(207) MZF1(231) ACAAT(292) T3R(418) LHX3(425) OTX(426) CRX(428) GFI1(438) NKX61(444) HOXA4(503) RORA1(540) CEBPGAMMA(565) LEF1TCF1(694) SREBP(864) TAXCREB(865) ATF3(867) COUP_DR1(870) HNF4_DR1(870) PPAR_DR1(870)
12	chr6:127101196-127101402	promoter	0.164	chr6:127059565-127403705	Ccnd2	12 :: MYOGENIN(19) LMO2COM(20) AP4(20) TAL1(20) E47(21) ZNF219(56) CACD(58) ZNF219(63) MINI19(112) MINI20(112) AML(140) PEBP(140)
13	chr7:133768949-133769198	UTR5	0.001	chr7:133738432-133792873	Nupr1	5 :: CHOP(144) ZNF219(214) MINI19(232) MINI20(232) AP4(243)
14	chr8:11008431-11008487	promoter	1.227	chr8:10634046-11198380	Irs2	1 :: ZNF219(56)
15	chr9:107198066-107198188	promoter	0.393	chr9:107192226-107229941	Cish	2 :: HAND1E47(26) XPF1(70)

CLUSTER 3 EPO RESPONSE GENES

#	Regulatory element	Type	Score	Locus	Gene	Candidate transcription factor binding sites (relative positions)
1	chr1:46863894-46866797	intergenic	0.260	chr1:45883712-46864387	Sic40a1	11 :: RORA2(7) AP1(85) TBX5(91) ZEC(159) CEBPB(165) ACAAT(208) XPF1(255) ZIC1(258) BRCA(260) CREBATF(329) NKX25(416)
2	chr1:58477056-58477926	intron	0.001	chr1:58463409-58483425	Clk1	28 :: CREBP1(7) USF(12) NKX25(12) KROX(14) NGFIC(14) SMAD4(41) COMP1(42) ACAAT(44) ALPHACP1(45) CDPGR1(47) DEC(60) ATF1(66) IRF7(79) CEBPDELTA(79) MZF1(94) TAACC(116) ZBRK1(138) CAP(154) STAT3(159) STAT5A(159) STAT5A(216) TAL1BETA47(216) GATA(226) BRCA(251) FOXO4(262) HNF3B(363) XFD1(363) XFD3(434)
3	chr1:141349747-141349938	promoter	0.233	chr1:141349785-141398242	Aspm	2 :: MMEF2(102) MZF1(174)
4	chr1:174124804-174125729	UTR3	1.008	chr1:174065935-174126804	Wdr42a	29 :: TBX5(7) BRACH(11) SMAD4(31) PAX4(283) CRX(304) GATA4(312) EGR(325) PAX4(328) MZF1(329) MOVOB(329) EGR(331) ALPHACP1(375) TAACC(388) IRF1(389) RORA1(392) SOX9_B1(406) STAT5A(474) NFKAPPAB(486) PEBP(557) EGR(652) MZF1(653) ACAAT(714) GATA(733) CDP(764) RSRFC4(766) FREAC7(766) TBP(766) NKX3A(767) NKX61(773)
5	chr10:41600939-41601649	intergenic	0.780	chr10:41536197-41634422	Sesn1	9 :: ATF1(404) NKX25(404) ZEC(445) GRE(454) SMAD(502) AP1(523) ATF4(524) CREBP1(524) NRF2(525)
6	chr10:41605964-41606159	promoter	0.812	chr10:41536197-41634422	Sesn1	2 :: CAP(160) IRF1(162)
7	chr10:57886990-57887512	UTR3	0.379	chr10:57770634-57909596	Lims1	8 :: CEBPGAMMA(120) POU1F1(125) SOX9_B1(131) RORA1(253) RORA2(253) AIRE(283) CDP(377) XFD2(430)
8	chr10:74980056-74980200	UTR5	0.010	chr10:74903767-74981083	1110038D17Rik	6 :: KROX(2) ETF(6) MINI20(14) ETF(51) MAZ(97) ETF(98)
9	chr11:22797527-22798111	intergenic	0.863	chr11:22759724-22890592	Commd1	5 :: XFD3(84) RORA1(225) GZF1(250) SEF1(342) RFX1(487)
10	chr11:22882537-22882825	promoter	1.719	chr11:22759724-22890592	Commd1	2 :: NFMUE1(38) NKX61(65)
11	chr11:94188005-94188644	intergenic	1.790	chr11:94103925-94189305	3300001P08Rik	6 :: TAACC(136) NKX25(179) GR(219) GRE(219) RBPJK(229) FOX(250)
12	chr11:98768251-98768497	promoter	2.475	chr11:98764968-98798998	Cdc6	3 :: RORA1(12) CDX2(164) PBX(222)
13	chr12:15823752-15823839	promoter	0.847	chr12:14799513-16543433	Trib2	3 :: PBX(16) CDPGR1(17) ACAAT(18)
14	chr12:15824292-15824420	promoter	1.196	chr12:14799513-16543433	Trib2	2 :: EGR(78) MTF1(79)
15	chr12:15824737-15824839	promoter	1.825	chr12:14799513-16543433	Trib2	2 :: NKX3A(49) NKX3A(55)
16	chr12:25644026-25644715	UTR3	0.002	chr12:25401263-25657431	Mboat2	14 :: CREL(123) NFKAPPAB(123) HOXA7(140) MAZ(164) EGR1(167) NGFIC(167) RFX(270) OTX(316) OCT4(348) DBP(447) CHOP(513) CDX2(516) FOXO4(519) FREAC2(582)
17	chr12:32636334-32636645	promoter	0.762	chr12:32398747-32643179	Hbp1	2 :: OCT4(49) STAT5A(233)
18	chr12:112681946-112682104	promoter	0.011	chr12:112669755-112722268	Tnfaip2	2 :: EGR(15) RBPJK(29)
19	chr13:94859070-94859968	intron	1.027	chr13:94717223-94971387	Lhfp12	5 :: GRE(111) COUP_DR1(248) STAT3(359) PAX4(480) XVENT1(554)
20	chr13:104555591-104556888	intergenic	0.011	chr13:104554663-104813353	Erb2ip	13 :: XPF1(68) GR(72) CEBPB(80) SOX9_B1(131) GZF1(170) TBP(183) GEN_INI2(685) BRCA(767) HMGYI(775) BRCA(850) NKX3A(923) GRE(1090) IRF1(1288)
21	chr13:120273301-120273637	intron	0.006	chr13:120249162-120274924	4833420G17Rik	6 :: CMAF(103) AP1(115) TBP(157) PXR(200) NKX3A(236) CRX(329) 51 :: PAX4(156) ACAAT(364) PEBP(366) NKX61(453) OCT4(458) HMGYI(482) HNF6(509) RSRFC4(514) TBX5(558) PADS(594) SEF1(602)

22	chr14:76838223-76840184	intron	0.008	chr14:76539983-77423955	Tsc22d1	ATF1(610) ATF4(611) CREBP1(611) CREBATF(611) CREBP1CJUN(611) RBPJK(674) E2F1DP1(675) FREAC2(687) XFD2(688) FOXO4(690) CREL(700) XFD1(710) FOX(711) DEC(714) E2A(792) HMGYI(868) TBP(1076) PLZF(1205) STAT5A(1315) RFX1(1374) ACAAT(1470) ATF4(1487) AP1(1487) STAT5A(1498) XVENT1(1520) GR(1523) STAT4(1542) E12(1630) E2A(1633) AP1(1693) USF(1702) E2A(1705) IRF2(1762) OTX(1783) COMP1(1810) CDX2(1816) XFD1(1819) CAP(1838) CETS168(1850) ACAAT(1909)
23	chr15:36260740-36261583	intergenic	0.010	chr15:36168752-36407383	Rnf19a	6 :: OTX(359) MMEF2(361) NKX61(363) POU1F1(499) HOX13(552) XVENT1(552)
24	chr16:20124823-20125817	UTR3	2.554	chr16:19983067-20137083	Klhl24	9 :: CDP(21) IRF7(108) CDP(160) STAT5A(373) CEBPDELTA(577) RBPJK(600) BRCA(740) TBP(981) GATA(982)
25	chr16:22811429-22811924	intergenic	1.790	chr16:22811495-22858708	Tbccd1	12 :: NRF2(108) VMAF(109) AP1(109) AP1(133) RORA2(134) CDPCR1(157) PBX(158) PITX2(182) CRX(183) VMAF(224) NRF2(254) AP1(255)
26	chr16:23989664-23989957	promoter	0.646	chr16:23930905-24393575	Bcl6	6 :: MOVOB(7) IRF7(40) AIRE(107) XFD3(159) HMGYI(172) NGFIC(195)
27	chr17:28936470-28936677	promoter	2.831	chr17:28918967-28995311	Brpf3	6 :: HNF3B(63) NFKAPPAB(80) PBX(93) OTX(95) TBX5(106) CEBPB(183)
28	chr17:28937250-28937366	promoter	3.192	chr17:28918967-28995311	Brpf3	6 :: RBPJK(54) EFC(82) SMAD(97) HP1SITEFACTOR(105) RUSH1A(109) XFD3(116)
29	chr18:38530135-38530833	intergenic	0.012	chr18:38477524-38578597	Gnpda1	27 :: HMGYI(40) IRF7(42) GATA(93) XPF1(95) FOXO4(147) FREAC2(148) FREAC7(148) OCT4(159) IRF7(178) STAT5A(216) STAT3(224) STAT5A(224) CETS168(226) NERF(228) NKX25(233) EFC(270) PAX4(277) POU1F1(279) CRX(286) HNF6(296) PXR(301) AIRE(304) RORA2(306) FREAC2(357) FOXO4(358) FOX(358) HNF3B(359)
30	chr18:70083849-70084061	promoter	0.001	chr18:69847676-70138698	Ccdc68	4 :: IRF7(22) IRF1(23) IRF2(23) HMGYI(71)
31	chr19:3385436-3385777	UTR3	0.012	chr19:3296161-3386882	Cpt1a	4 :: HMGYI(58) XFD1(208) STAT5A(240) PITX2(286)
32	chr19:30103569-30104000	promoter	0.359	chr19:30080513-30172895	Uhrf2	3 :: OCT4(16) HMGYI(335) PADS(357)
33	chr19:30167355-30168332	UTR3	0.824	chr19:30080513-30172895	Uhrf2	19 :: MAZ(62) MZF1(64) E2F1DP1(119) RBPJK(120) RFX(162) PLZF(264) FOX(264) CEBPB(270) GR(285) PLZF(341) CEBPB(498) SOX9_B1(593) RFX1(614) MYCMAX(626) PADS(630) CEBPB(783) CEBPDELTA(783) HNF3B(843) CDX2(848)
34	chr19:53674797-53674946	UTR5	0.004	chr19:53615844-53966718	Smc3	7 :: ETF(75) EGR(76) KROX(77) EGR1(77) NGFIC(77) NFMUE1(91) KROX(146)
35	chr2:73119315-73120504	intergenic	0.910	chr2:73113401-73152136	1700023B02Rik	10 :: ZBRK1(410) CEBPB(496) AP1(605) PAX4(609) FREAC2(632) FOXO4(633) MMEF2(673) NKX25(846) ZIC3(1094) HMGYI(1147)
36	chr2:119449600-119449853	intron	2.521	chr2:119442827-119478733	Nusap1	4 :: COMP1(10) E2F1DP1(97) BRACH(103) TBX5(107)
37	chr2:127950515-127950699	promoter	0.954	chr2:127949700-128438427	Bcl2l11	3 :: NERF(47) NFKAPPAB(119) KROX(172)
38	chr2:130665938-130666012	promoter	0.008	chr2:130523286-130732224	4930402H24Rik	1 :: MTF1(10)
39	chr3:68650928-68651812	intergenic	0.010	chr3:68502448-68809602	Irf80	21 :: PAX4(113) CRX(120) MYCMAX(171) XPF1(182) ZTA(257) HP1SITEFACTOR(323) RORA1(449) RORA2(449) AP1(473) POU1F1(558) SMAD(614) CHOP(638) ZBRK1(640) PXR(640) ZIC1(645) IRF1(696) HNF6(805) RORA1(809) RORA2(809) NKX61(867) OCT4(873)
40	chr3:95391276-95391605	promoter	0.662	chr3:95391530-95428893	Golph3l	2 :: GATA(263) HNF6(306)
41	chr3:95391634-95391824	promoter	1.817	chr3:95391530-95428893	Golph3l	4 :: HNF3B(52) FREAC2(53) PLZF(67) PLZF(101)
42	chr3:151846974-151847753	UTR3	0.280	chr3:151828865-151874289	Dnajb4	12 :: TBX5(115) PAX4(118) STAT5A(123) XFD1(156) TBP(157) TBX5(224) HMGYI(255) E4BP4(260) CREBP1(260) PITX2(313) CREL(483) NFKAPPAB(484)

43	chr3:151873358-151873556	promoter	1.706	chr3:151828865-151874289	Dnajb4	6 :: ETF(65) CREBP1(73) NFMUE1(82) CEBPB(87) NFMUE1(112) NFMUE1(118)
44	chr3:151873665-151873739	promoter	0.692	chr3:151828865-151874289	Dnajb4	3 :: MYCMA(18) ETF(22) STAT3(27)
45	chr4:11130590-11131613	UTR3	0.007	chr4:11101541-11131926- chr4:11126305-11192145	Ccne2-Ints8	22 :: XVENT1(153) PLZF(169) CEBPB(198) E4BP4(198) CEBPGAMMA(200) AP1(211) TBP(216) GRE(345) FREAC2(379) FREAC7(379) FOXO4(380) XFD2(380) NFKAPPAB(418) RFX1(441) ZTA(603) RORA1(630) RORA2(630) ATF1(827) FOXO4(873) PADS(921) FREAC2(970) FOX(970)
46	chr4:11152951-11153319	intron	0.362	chr4:11126305-11192145	Ints8	2 :: HNF3B(125) FOX(126)
47	chr4:11188595-11189170	intergenic	2.587	chr4:11126305-11192145	Ints8	3 :: CMAF(315) GRE(322) OCT4(346)
48	chr4:24432154-24432619	UTR5	0.005	chr4:23432311-24544401	F730047E07Rik	3 :: CREBP1CJUN(326) ALPHACP1(386) PAX4(424)
49	chr4:33377072-33377572	intergenic	0.126	chr4:33321479-33397283	Pnrc1	7 :: IRF1(59) STAT5A(96) STAT5A(104) MINI20(178) RFX1(197) ZTA(234) STAT5A(362)
50	chr4:94357310-94358275	intergenic	2.551	chr4:94269948-94403090	Lrrc19	19 :: PXR(117) CMAF(145) AP1(147) SOX9_B1(284) STAT3(386) STAT5A(386) IRF1(422) XPF1(498) ATF1(533) XPF1(537) CETS168(539) ZEC(548) PBX(548) CDPCR1(549) CEBPDELTA(584) GRE(590) MTF1(635) SMAD4(718) NKX3A(885)
51	chr4:94363469-94363913	intergenic	0.093	chr4:94269948-94403090	Lrrc19	9 :: SOX9_B1(13) NFKAPPAB(153) HMGYI(153) RBPJK(385) GATA(412) FREAC7(427) FOX(428) XFD2(428) XFD3(428)
52	chr4:134482963-134483294	UTR3	3.407	chr4:134470864-134486894	D4Wsu53e	6 :: OCT4(155) GR(172) NFMUE1(176) TBX5(198) HMGYI(256) FOX(294)
53	chr5:8059513-8060113	intron	0.134	chr5:7984228-8072097	Sri	5 :: ZIC1(149) ZIC3(149) ZIC3(154) ZEC(174) CEBPDELTA(181)
54	chr5:64813890-64814897	intergenic	0.008	chr5:64742754-65316032	Klf3	23 :: RORA1(83) IRF1(120) COMP1(219) STAT3(267) IRF7(270) RFX(291) RFX1(295) CRX(401) E2F1DP1RB(454) ZEC(462) NKX25(463) CDPCR1(482) CRX(506) GR(553) RBPJK(590) FOXO4(636) USF(657) MYCMA(657) MYCMA(664) USF(664) COUP_DR1(665) XFD1(714) NERF(829)
55	chr5:93650595-93651290	intergenic	0.009	chr5:93635055-93947516	Ccng2	8 :: XFD1(86) FREAC7(87) HNF6(88) CDX2(100) NERF(480) CETS168(482) STAT3(485) ZEC(545)
56	chr5:110732374-110732593	intron	0.006	chr5:110714919-110768651	Pole	3 :: GR(94) SMAD4(113) SZF11(158)
57	chr5:139725497-139725882	UTR3	0.004	chr5:139663800-139728323	Unc84a	12 :: HMGYI(57) PAX4(91) PAX4(100) HNF3B(107) HNF6(109) MMEF2(113) GATA(128) CEBPB(138) HP1SITEFACTOR(244) GZF1(248) MAZ(329) DBP(348)
58	chr5:145952385-145952496	intergenic	1.191	chr5:145952464-145966109	Zkscan14	2 :: DEC(94) RORA2(101)
59	chr5:148706410-148706512	promoter	0.507	chr5:148689557-148768892	Slc46a3	3 :: CDPCR1(69) HOXA7(71) MTF1(100)
60	chr6:39350505-39351208	intron	0.953	chr6:39341105-39412283	Mkm1	19 :: E2F1DP1(3) BRACH(65) FOXO4(208) TAACC(219) RBPJK(241) SMAD(248) TAACC(263) XBP1(303) NKX25(379) CDP(455) GEN_INI2(513) OCT4(515) ZIC1(536) ZEC(540) STAT4(567) IRF1(669) IRF2(669) SMAD(696) NKX25(702)
61	chr6:71442383-71442656	promoter	1.639	chr6:71390484-71493846	Rnf103	3 :: RORA1(166) PAX4(191) BRACH(198)
62	chr6:71445013-71445942	intron	2.422	chr6:71390484-71493846	Rnf103	4 :: ZTA(459) NKX61(481) ACAAT(552) TAACC(673)

63	chr6:72022557-72024200	intergenic	0.008	chr6:71929473-72156142	St3gal5	26 :: OCT4(20) RORA1(84) RORA2(84) HNF6(87) GR(137) SOX9_B1(143) POU1F1(335) HP1SITEFACTOR(358) MMEF2(360) NKX61(376) ZTA(632) XPF1(706) TAL1BETAE47(921) HOXA7(929) NFMUE1(1050) NRF2(1159) NKX25(1174) NFMUE1(1233) AP1(1287) RORA2(1290) ACAAT(1387) CDP1(1390) RFX1(1448) E2F1DP1RB(1546) E2F1DP1(1546) NRF2(1574)
64	chr6:87763135-87763397	promoter	0.001	chr6:87730134-87768352	Rab43	2 :: P53(7) RBPJK(134)
65	chr6:88581637-88582342	intergenic	0.002	chr6:88577443-88785880	Mgll	4 :: SMAD(198) CHOP(289) GZF1(433) IRF1(490)
66	chr6:120307241-120307566	UTR5	0.133	chr6:120244603-120413233	Ccdc77	2 :: NFMUE1(202) STAT3(285)
67	chr6:134869745-134869871	promoter	0.003	chr6:134837777-134932012	Cdkn1b	2 :: GATA(3) KROX(125)
68	chr7:28261756-28262268	UTR3	0.089	chr7:28253153-28271958	Sertad3	10 :: EGR1(146) SMAD(154) TBP(198) SMAD(238) IRF2(258) STAT5A(262) RBPJK(280) PAX4(339) MYCMA(426) CHOP(431)
69	chr7:107363803-107364889	intergenic	1.015	chr7:107333454-107434023	Pgm211	17 :: RBPJK(51) HNF3B(107) TAL1BETAE47(163) SMAD(190) E4BP4(203) KROX(243) MAZ(246) KROX(249) TAL1BETAE47(263) USF(263) HNF3B(295) CMAF(339) HNF3B(387) SOX9_B1(388) CEBPGAMMA(595) AP1(964) NRF2(965)
70	chr7:107374745-107375015	promoter	0.319	chr7:107333454-107434023	Pgm211	2 :: CHOP(13) GATA4(144)
71	chr7:117914959-117915555	promoter	0.002	chr7:117773416-117959856	Ampd3	4 :: TBX5(238) MYCMA(324) APOLYA(339) SMAD(491)
72	chr7:117957033-117957457	intergenic	0.525	chr7:117955939-117993505	Rnf141	6 :: DBP(144) XFD2(199) HNF3B(200) NKX3A(206) IRF7(220) RFX1(405)
73	chr7:128108328-128108990	intron	0.002	chr7:128089798-128203862	Cdr2	10 :: RBPJK(130) PEBP(245) EFC(271) GR(344) FOXO4(425) MYCMA(434) RBPJK(434) OTX(472) CDP(513) CMAF(537)
74	chr7:138527079-138527352	intron	0.001	chr7:138506271-138532136	Pstk	2 :: COUP_DR1(24) PPAR_DR1(24)
75	chr8:54953810-54954867	intergenic	4.472	chr8:54608795-55162881	Neil3	12 :: PLZF(80) BRCA(398) OTX(553) PITX2(564) GZF1(565) CDP1(666) PBX(667) IRF1(690) TBX5(703) GR(763) HNF3B(772) TAACC(1027)
76	chr9:14019472-14020624	intergenic	0.006	chr9:13651101-14157547	Sesn3	22 :: EFC(373) ZIC1(379) ZIC3(379) BRCA(380) XVENT1(385) VMAF(400) NRF2(401) ZTA(456) VMAF(459) NRF2(460) CEBPDELTA(530) CHOP(570) CEBPB(572) CREBATF(573) SEF1(626) COUP_DR1(638) PPAR_DR1(638) STAT3(729) CEBPDELTA(730) GR(910) XPF1(914) OCT4(942)
77	chr9:43048862-43048973	promoter	0.006	chr9:43014909-43118840	Oaf	2 :: USF(33) CAP(83)
78	chr9:82759675-82761073	UTR3	0.004	chr9:82743563-83003506	Phip	31 :: HNF6(62) PXR(116) PITX2(136) E4BP4(224) CREBP1(224) FOXO4(362) HNF3B(373) FREAC7(374) FOX(374) CEBPGAMMA(379) TBP(445) RUSH1A(448) STAT5A(457) NKX25(462) POU1F1(464) FOXO4(599) SEF1(658) TAACC(672) AP1(717) RORA2(766) TAACC(849) BRCA(911) RUSH1A(1051) HMGYI(1059) GATA(1073) OCT4(1082) NKX3A(1089) RSRFC4(1128) TBP(1128) AP1(1207) PLZF(1364)
79	chr9:107661385-107662106	intron	0.001	chr9:107612816-107675887	Rbm5	9 :: NKX25(81) SOX9_B1(244) GR(360) GRE(360) GR(520) XBP1(678) P53(678) CEBPB(716) CREBP1(716)
80	chr9:120025990-120026183	intron	1.463	chr9:120007378-120036900	Slc25a38	5 :: NERF(40) CETS168(42) STAT5A(92) STAT3(100) STAT5A(107)
81	chrX:35884632-35885467	UTR3	0.001	chrX:35809633-35953832	Cul4b	13 :: MMEF2(39) RUSH1A(175) AIRE(179) CDX2(180) XVENT1(193) HP1SITEFACTOR(232) ZEC(274) NKX25(363) CEBPB(474) STAT4(585) COUP_DR1(733) USF(733) ZBRK1(734)

CLUSTER 2 EPO RESPONSE GENES

#	Regulatory element	Type	Score	Locus	Gene	Candidate transcription factor binding sites (relative positions)
1	chr1:46910506-46910613	promoter	0.967	chr1:45988084-47910238	Slc39a10	3 :: NRF1(41) HIF1(48) IRF1(102)
2	chr1:93181933-93182790	UTR3	0.302	chr1:93123943-93193919	Ube2f	11 :: PAX3(86) R(212) IPF1(289) NRF1(351) LYF1(480) STAF(485) OCT1(514) FOXD3(588) CIZ(590) PXR(648) AP4(739)
3	chr1:123939632-123940464	intergenic	0.002	chr1:123425104-124464059	Ddx18	12 :: AP4(216) MYB(256) AHRARNT(258) E47(268) MYB(268) MEF3(339) TST1(382) PU1(411) E4F1(420) HSF2(573) HSF(576) OCT1(633)
4	chr1:194957752-194958232	promoter	0.564	chr1:194861895-194979305	AA408296	10 :: OCT1(23) LMO2COM(48) AP4(49) MYOGENIN(49) FOXO3(120) FOXO4(120) TTF1(229) DEC(307) TTF1(308) NKX25(308)
5	chr10:7435096-7436289	UTR3	0.301	chr10:7398728-7445813	##Lats1, NM_010690	19 :: TBX5(102) TBP(461) NKX25(481) CREBATF(519) PAX3(587) FOXM1(611) MEIS1BHOXA9(657) FOXD3(674) AP2REP(716) TAACC(749) PLZF(828) ATATA(930) RUSH1A(932) RFX1(958) PLZF(1011) CDX(1082) HNF3ALPHA(1089) CEBP(1096) NKX25(1163)
6	chr10:39862357-39862885	intergenic	0.912	chr10:39862069-39966845	Bxdc1	2 :: CDX2(142) OCT1(423)
7	chr10:40022470-40022902	promoter	0.001	chr10:39977472-40069142	Amd2	9 :: PAX3(44) HIF1(52) AHRHIF(53) CEBPGAMMA(169) USF(193) HIF1(194) ZEC(203) SPZ1(231) MYB(310)
8	chr10:61110627-61110752	promoter	0.008	chr10:61045121-61143068	Ppa1	1 :: HSF(90)
9	chr10:77178475-77178964	intergenic	1.856	chr10:77081518-77183316	Ube2g2	19 :: USF(78) E47(90) TAL1ALPHA(90) AP4(90) TAL1(90) LBP1(90) MYOGENIN(91) HIF1(152) TAL1(159) AP4(160) KAISO(164) KAISO(176) TAL1(189) PAX(268) AHRARNT(283) KAISO(299) KAISO(356) SPZ1(381) NERF(429)
10	chr10:121024312-121025039	UTR3	0.011	chr10:121023805-121078703	Xpot	10 :: POLY(136) IPF1(223) XBP1(229) TFE(310) COREBINDINGFACTOR(318) MRF2(340) CEBP(344) COREBINDINGFACTOR(344) OSF2(346) FXR(370)
11	chr11:6460846-6461263	intron	0.001	chr11:6420962-6497746	Ccm2	8 :: FOXO3(178) FOXO4(178) OSF2(210) AML(211) COREBINDINGFACTOR(212) PADS(213) PU1(225) TAL1BETA(47)(262)
12	chr11:17112481-17112728	promoter	1.616	chr11:17100398-17112862	Pno1	5 :: HSF(16) IK3(41) APOLYA(78) PAX2(81) GR(82)
13	chr11:45664960-45665176	promoter	0.749	chr11:44818751-45739501	Clint1	1 :: TST1(156)
14	chr11:70818405-70818592	promoter	0.094	chr11:70796538-70820942	Dhx33	1 :: PLZF(126)
15	chr11:74466035-74467351	intron	0.003	chr11:74455362-74486426	1300001101Rik	35 :: SREBP(231) EGR3(258) EBF(407) STAF(445) MYB(511) E47(514) OLF1(521) EBF(521) LYF1(524) USF(559) E4F1(588) STRA13(593) DR1(634) ZIC3(656) MYOGENIN(719) TAL1ALPHA(720) LMO2COM(720) AP4(720) TAL1(720) LBP1(720) RP58(721) AP4(732) MYOGENIN(732) LMO2COM(733) TAL1(733) LBP1(733) DEC(858) ZID(965) NRSF(1047) HSF(1050) AP2REP(1075) MEF3(1083) SMAD3(1203) NRSF(1241) MINI19(1287)
16	chr11:100180665-100180897	promoter	1.000	chr11:100136694-100195706	Eif1	2 :: OCT1(141) SREBP(188)
17	chr11:116705089-116705192	promoter	0.582	chr11:116689361-116705242	Jmjd6	3 :: E47(0) HIF1(0) AHRHIF(5)
18	chr12:40983796-40984415	intergenic	0.011	chr12:40925967-41040688	lfrd1	6 :: CEBP(84) HSF2(148) AP3(305) NKX61(336) CEBP(555) ZIC1(583)
19	chr13:14993792-14994794	intergenic	0.971	chr13:14718227-15555522	AW209491	14 :: FOXJ2(69) OCT1(122) TBX5(181) GR(185) LEF1TCF1(188) STAT(233) PTF1BETA(256) PXR(281) MEIS1BHOXA9(345) OCT1(411) TBP(557) BRN2(632) CDPCR1(677) LEF1TCF1(920)
20	chr13:34106165-34106559	intron	0.956	chr13:34082229-34129509	Ripk1	4 :: PXR(36) PTF1BETA(150) SMAD3(183) TBX5(365)
21	chr14:8927355-8927809	intergenic	0.909	chr14:8889081-8930753	Rpp14	6 :: ZIC3(181) HSF(210) FOXM1(286) RP58(338) RFX1(341) CEBP(341)
22	chr14:27457350-27457469	promoter	0.002	chr14:27447900-27483487	Arf4	3 :: STAF(17) STAT3(68) STAF(112)

23	chr14:32319804-32320354	UTR3	0.005	chr14:32308329-32337525	Eaf1	3 :: NERF(20) OCT1(266) MYB(524)
24	chr15:10390832-10391259	intergenic	0.653	chr15:10339652-10416820	Bxdc2	10 :: STAT6(85) HSF(117) TAL1(170) LBP1(170) FOXO3(223) FOXO4(223) XFD3(223) BRN2(231) PAX2(314) ZIC1(346)
25	chr15:34011249-34011680	promoter	0.002	chr15:33617656-34167620	Mtdh	3 :: CEBPGAMMA(73) CDPCR3(81) MRF2(228)
26	chr15:38923294-38923642	intergenic	1.097	chr15:38918882-38944881	Slc25a32	3 :: STRA13(58) E47(59) AML(247)
27	chr15:75754856-75754990	intergenic	1.832	chr15:75746893-75755034	Pycl	3 :: NERF(58) AP4(64) NERF(65)
28	chr15:76140352-76140509	intergenic	0.361	chr15:76137701-76161634	Exosc4	2 :: STAT(53) HSF2(68)
29	chr15:76276880-76277426	intergenic	0.005	chr15:76205381-76308820	Bop1	20 :: TBX5(69) E47(71) ZID(99) STAT6(181) LMO2COM(305) E47(340) TBX5(342) ROAZ(353) EBF(353) FOXD3(391) PAX2(395) MYOGENIN(428) AP4(429) LBP1(429) E47(430) TBX5(431) GR(466) TAL1ALPHA(469) TAL1BETA(469) TAL1(469)
30	chr15:76289677-76289991	UTR3	2.192	chr15:76286394-76289890	Scx	5 :: AP2REP(96) PAX(102) OCT1(160) OCT1(183) CEBP(184)
31	chr15:80083413-80083850	intergenic	0.291	chr15:80045977-80085585	Smcr7l	10 :: GR(11) COUP(19) DR1(19) PPARA(22) MRF2(65) MYB(179) NKX25(194) STRA13(195) USF(195) AP1FJ(220)
32	chr15:101979552-101979610	promoter	0.215	chr15:101979562-102007007	Soat2	1 :: KAISO(14)
33	chr16:11219626-11220919	intergenic	0.057	chr16:11176439-11220485	Rsl1d1	11 :: AP3(211) HSF(362) STAT4(567) OCT1(628) BRN2(653) CDX(762) MSX1(783) RFX1(803) FOXO4(828) NKX61(849) MSX1(855)
34	chr16:16302744-16302863	promoter	1.016	chr16:16272839-16312172	Yars2	2 :: OCT1(34) AML(99)
35	chr16:16302991-16303076	UTR5	0.319	chr16:16272839-16312172	Yars2	2 :: NRF1(11) STAF(65)
36	chr16:37390475-37391666	intergenic	1.022	chr16:37385019-37540300	Gtf2e1	11 :: COREBINDINGFACTOR(35) PAX(369) OCT1(623) TBP(663) AP3(768) TBP(797) XFD3(897) PADS(991) IRF1(996) CDX2(1016) RUSH1A(1018)
37	chr16:78377696-78377829	promoter	0.486	chr16:78360101-78543749	Btg3	2 :: BRACH(88) TBX5(91)
38	chr17:17539377-17539908	intergenic	1.714	chr17:17286256-17539520	Riok2	2 :: TST1(34) AP3(34)
39	chr17:46919582-46919669	UTR5	0.549	chr17:46910856-47027562	Rpl7l1	2 :: NRF1(24) ZID(81)
40	chr17:94971998-94972853	intergenic	0.000	chr17:94126646-95205589	Mettl4	14 :: STAT(83) EBF(84) OCT1(214) PAX(275) LHX3(325) IPF1(427) OLF1(441) RFX1(482) FXR(490) STAT(509) FREAC3(512) IRF1(554) FOXO4(762) GR(765)
41	chr18:52676293-52677582	intergenic	0.547	chr18:52492443-52676773	Srfbp1	7 :: PAX2(154) CEBP(157) COUP(224) DR1(225) FOXO4(275) APOLYA(317) SMAD3(372)
42	chr19:16000265-16000545	promoter	0.006	chr19:14983901-16029900	Psat1	1 :: CEBP(104)
43	chr19:44123246-44123611	intron	0.003	chr19:44105557-44144016	Erlin1	3 :: BRN2(184) NKX25(216) ZTA(358)
44	chr19:47164544-47164741	promoter	0.706	chr19:47163934-47206575	Pdcd11	2 :: AP4(115) CDPCR3(132)
45	chr19:47204679-47205128	intron	0.584	chr19:47163934-47206575	Pdcd11	1 :: PAX(388)
46	chr2:22773771-22774117	intron	0.374	chr2:22731361-22795779	Pdss1	5 :: ROAZ(14) ATATA(97) NKX25(100) STAT6(115) MRF2(169)

47	chr2:24829583-24829684	UTR3	0.013	chr2:24827990-24830618	Mrpl41	1 :: APOLYA(72)
48	chr2:26748246-26748386	intron	0.132	chr2:26721513-26758377	Surf6	1 :: DELTAEF1(140)
49	chr2:32559294-32559576	intergenic	0.018	chr2:32537680-32561077	Fpgs	2 :: AP1FJ(210) AP4(241)
50	chr2:72313092-72313239	promoter	0.319	chr2:72280686-72774438	Cdca7	1 :: CDPCR1(97)
51	chr2:72313269-72313408	promoter	0.700	chr2:72280686-72774438	Cdca7	3 :: RUSH1A(59) CEBP(64) CEBPGAMMA(67)
52	chr2:120392880-120392921	promoter	1.928	chr2:120389575-120429403	Snap23	3 :: PAX(19) HSF(20) STAF(26)
53	chr2:130437095-130437624	intron	0.003	chr2:130408332-130458554	Fastkd5, Ubox5	6 :: ZEC(51) PAX3(134) XBP1(303) AP3(420) FOXM1(424) AIRE(437)
54	chr2:132631832-132632344	intron	1.258	chr2:132621676-132642996	Trmt6	8 :: OLF1(45) E47(88) LMO2COM(88) AP4(88) TAL1(88) LBP1(88) MYOGENIN(89) OCT1(395)
55	chr2:132642271-132642833	promoter	1.341	chr2:132621676-132642996	Trmt6	3 :: ZEC(34) CEBP(120) AIRE(295)
56	chr3:37372064-37372873	intron	0.009	chr3:37318256-37538845	Spata5	7 :: STAT4(222) STAT6(222) CEBPDELTA(337) CDX(689) NKX25(694) IRF1(713) ATATA(773)
57	chr3:87856041-87856299	intron	0.165	chr3:87831436-87860375	Gpatch4	2 :: AHRARNT(113) TAL1(179)
58	chr3:122079008-122079817	intergenic	0.012	chr3:121969592-122122744	Dnttip2	10 :: R(111) AP4(113) KAISO(201) VJUN(434) ATF3(434) CREBATF(435) SPZ1(510) PU1(540) PAX(618) AP1FJ(733)
59	chr3:137590985-137591878	intergenic	0.163	chr3:137591779-137708137	Dapp1	2 :: NKX25(797) TFE(815)
60	chr4:45071170-45072087	intergenic	0.001	chr4:45025172-45117976	Polr1e	27 :: STAT3(137) STAT(140) NRF1(150) MYOGENIN(240) AP4(241) LBP1(242) MYOGENIN(248) LBP1(249) STAT(283) HIF1(306) EGR3(307) AHRHIF(307) CDPCR1(497) ZTA(507) USF(512) R(529) FXR(559) MEIS1BHOXA9(564) FOXO4(680) MEIS1BHOXA9(704) HIF1(725) AHRHIF(725) CEBP(753) IRF1(770) DEC(771) USF(771) MYB(821)
61	chr4:48291304-48291574	promoter	1.387	chr4:48291405-48444825	Invs	2 :: NKX61(107) AP3(157)
62	chr4:48480777-48481152	intron	0.832	chr4:48443828-48553346	Tex10	3 :: IRF1(135) PLZF(171) PLZF(189)
63	chr4:108510642-108511225	intron	0.664	chr4:108505790-108551674	Txndc12	3 :: EGR3(98) DR1(283) MEIS1BHOXA9(507)
64	chr4:132048769-132049475	UTR3	0.006	chr4:132024048-132086198	Sesn2	16 :: PPARA(1) OLF1(158) SREBP(205) CDPCR3(214) DR1(242) LDSPOLYA(323) E47(333) TAL1ALPHA(47(333) TAL1BETA(47(333) AP4(333) LBP1(333) CDPCR1(356) NFKAPPAB65(486) STAT3(487) STAT6(500) PU1(568)
65	chr5:20492445-20493250	UTR3	0.010	chr5:20457641-20688227	Ptpn12	31 :: FOXD3(34) FOXJ2(35) FOXO4(37) HNF3ALPHA(37) FOXO3(38) RFX1(158) HIF1(162) MSX1(165) DR3(167) FOXO3(247) FOXO4(247) XFD3(247) FOXJ2(266) LEF1TCF1(284) LMO2COM(293) ZEC(306) MINI19(314) COUP(330) ATATA(454) FREAC3(473) PAX2(494) PXR(586) IPF1(595) CDX2(605) FOXJ2(606) PAX2(609) TTF1(610) CIZ(640) NFAT(643) IK3(674) FOXJ2(686)
66	chr5:36963855-36964094	UTR5	0.713	chr5:36925023-37138549	D5Ertd579e	3 :: DELTAEF1(10) TBX5(11) E4F1(109)
67	chr5:77739571-77739720	promoter	0.317	chr5:77712075-77739835	2610024G14Rik	2 :: AHRHIF(104) PAX3(111)
68	chr5:115791159-115791183	promoter	1.697	chr5:115790745-115793561	Triap1	1 :: CHCH(18)
69	chr5:115791202-115791279	UTR5	0.499	chr5:115790745-115793561	Triap1	5 :: NRF1(2) PAX3(30) VJUN(34) ATF3(34) CREBATF(34)

70	chr5:115793402-115793614	UTR3	2.440	chr5:115790745-115793561	Triap1	2 :: FOXO3(98) HNF3ALPHA(101)
71	chr5:116475339-116475501	promoter	0.482	chr5:116456395-116575565	Prkab1	1 :: CDX2(138)
72	chr5:121889960-121890352	UTR3	0.044	chr5:121836622-121893925	C330023M02Rik	11 :: RP58(72) TAL1ALPHA(47)(73) TAL1BETAE(47)(73) PU1(103) DR3(116) PAX3(116) TCF4(125) LEF1TCF1(127) PAX3(132) ATATA(183) TBP(225)
73	chr5:136407952-136408618	intron	0.005	chr5:136367448-136455806	Ywhag	17 :: CEBPGAMMA(234) TAL1(406) MYOGENIN(407) LMO2COM(414) CEBPDELTA(426) DELTAEF1(476) AP1FJ(494) ZTA(497) VJUN(508) ATF3(508) CREBATF(509) PADS(510) AIRE(519) RFX1(523) CDPCR3(528) TBX5(534) AHRARNT(544)
74	chr5:147759258-147759445	promoter	0.831	chr5:147659307-147767179	Gtf3a	2 :: NRF1(2) POLY(114)
75	chr5:147807260-147807905	intergenic	2.005	chr5:147766098-147828678	Mtif3	12 :: TTF1(195) CDX(252) CEBPDELTA(253) VBP(253) OCT1(254) TBP(286) SMAD3(310) CEBPGAMMA(323) STAF(394) STAT6(474) NFKAPPAB65(536) SREBP(613)
76	chr5:150048769-150049550	intergenic	3.571	chr5:149864627-150076628	Uspl1	11 :: AP4(198) LBP1(198) VJUN(288) ATF3(288) CREBATF(288) OCT1(362) NKX25(405) MEIS1BHOXA9(444) ZEC(572) AP4(663) LDSPOLYA(728)
77	chr6:58468540-58469245	intergenic	0.050	chr6:58387614-58783636	Abcg2	5 :: SMAD3(141) TBP(153) MSX1(224) DEC(330) LYF1(334)
78	chr7:3592078-3592336	intron	0.868	chr7:3580377-3596911	Prpf31	2 :: AP2REP(162) LYF1(179)
79	chr7:35829530-35830027	intergenic	0.388	chr7:35829741-35904302	Cebpg	4 :: PU1(214) STRA13(428) USF(428) CEBP(480)
80	chr7:35832900-35833380	UTR3	0.306	chr7:35829741-35904302	Cebpg	6 :: EBF(71) COUP(149) CDX(250) AIRE(257) NKX61(261) GR(386)
81	chr7:71517584-71518479	intergenic	0.017	chr7:71487048-71538616	Mphosph10	15 :: TBX5(50) SREBP(52) TAL1BETAE(47)(118) STAT3(343) LYF1(346) TBX5(502) MYB(682) MYOGENIN(689) E47(690) TAL1ALPHA(47)(690) LMO2COM(690) TAL1(690) USF(690) AP4(691) CREBATF(800)
82	chr7:105850380-105851066	promoter	0.009	chr7:105805097-105987342	Prkrir	14 :: CEBPDELTA(60) PAX(81) TCF4(147) MYB(314) FXR(334) PXR(337) STAF(415) RUSH1A(427) AIRE(431) ZIC1(495) XBP1(512) OCT1(533) LEF1TCF1(543) GR(543)
83	chr8:47620772-47621477	UTR3	0.009	chr8:47382700-47636745	Acs11	24 :: STAT3(181) STAT4(219) PAX(250) IRF1(254) AIRE(283) CEBP(288) LYF1(290) PTF1BETA(295) IRF1(308) CEBP(328) NKX25(484) BRACH(516) FOXD3(529) FOXJ2(530) HNF3ALPHA(532) GR(575) NFAT(578) OCT1(580) FOXO4(598) HNF3ALPHA(605) FOXJ2(606) NKX62(606) FOXD3(607) CDPCR3(609)
84	chr8:48618537-48618767	promoter	0.645	chr8:48617884-48752204	Rwdd4a	7 :: HIF1(145) AHRHIF(145) AP4(158) LMO2COM(164) AP4(164) LBP1(164) SPZ1(216)
85	chr8:48712003-48712778	intergenic	0.696	chr8:48617884-48752204	Rwdd4a	9 :: STAT4(38) OCT1(49) CEBPGAMMA(66) OCT1(72) BRACH(125) CEBP(425) MEF3(486) LYF1(533) NFKAPPAB65(662)
86	chr8:109456116-109456760	intergenic	0.006	chr8:109417494-109459642	Cirh1a	15 :: CDX(58) VBP(66) VBP(83) STAT3(161) IK3(163) MEIS1BHOXA9(177) AP4(268) LBP1(269) E47(367) LMO2COM(367) HSF(392) NFAT(472) NFKAPPAB65(474) TFE(611) DEC(612)
87	chr8:113573352-113573598	intron	0.170	chr8:113551672-113593195	Aars, Exosc6	2 :: XBP1(102) HIF1(102)
88	chr8:126520131-126520512	UTR3	1.332	chr8:126507040-126545209	Taf5l	8 :: PLZF(102) FOXO3(111) FOXO4(111) XFD3(111) MRF2(116) CEBPGAMMA(134) NRF1(202) COREBINDINGFACTOR(289)
89	chr9:35017379-35017529	promoter	0.600	chr9:35017433-35024588	Srpr	3 :: COUP(70) COUP(77) ATF3(145)

90	chr9:107899506-107900141	intergenic	3.805	chr9:107876167-107904976	D330022A01Rik, Ube1l	15 :: NERF(80) FXR(83) CHCH(96) ROAZ(99) PAX(122) AP1FJ(163) TTF1(187) STAF(219) EGR3(223) STAT3(313) STAT(313) IK3(315) NRSF(509) PAX3(584) DELTAEF1(607)
91	chr9:109798990-109799748	intergenic	0.003	chr9:109751964-109833781	Cdc25a	13 :: DR3(36) NKX25(104) LBP1(199) MYOGENIN(200) STAF(201) AP4(266) STRA13(390) MYOGENIN(391) RP58(418) RFX1(462) TAL1BETAE47(556) NFAT(681) TBP(714)
92	chr9:119235322-119235640	intergenic	0.809	chr9:119213978-119250657	Myd88	3 :: OCT1(205) PADS(300) CREBATF(301)
93	chrX:72341166-72341266	UTR5	1.812	chrX:72330260-72355109	Dkc1	2 :: NRF1(20) CHCH(99)
94	chrX:72354135-72354354	UTR3	0.127	chrX:72330260-72355109	Dkc1	2 :: ATF3(99) SREBP(118)
95	chrX:131071648-131072128	UTR3	0.222	chrX:131011822-131077499	Timm8a1	3 :: HSF(40) MSX1(190) OCT1(345)
96	chrX:131077064-131077274	promoter	0.164	chrX:131011822-131077499	Timm8a1	5 :: COUP(32) DR1(32) IK3(75) IK3(140) PTF1BETA(144)

CLUSTER 1 EPO RESPONSE GENES

#	Regulatory element	Type	Score	Locus	Gene	Candidate transcription factor binding sites (relative positions)
1	chr1:9536703-9537191	UTR3	2.856	chr1:9289982-9538156	Rrs1	5 :: ATF3(77) MOVOB(327) CHCH(327) MIF1(436) RFX1(437)
2	chr1:37799603-37800356	intergenic	1.341	chr1:37496193-37811598	Mgat4a	8 :: SOX(88) SMAD3(251) TCF4(256) LEF1TCF1(258) BRN2(306) SRF(335) PAX3(672) IRF7(693)
3	chr1:88191006-88191258	intergenic	0.006	chr1:88175483-88240366	B3gnt7	4 :: E2F(74) STAF(105) SMAD3(138) CACCCBINDINGFACTOR(225)
4	chr1:121421987-121422143	promoter	0.310	chr1:121401216-121444578	Tmem185b	4 :: PXR(60) COUP(66) COUP_DR1(66) PPAR_DR1(66)
5	chr1:121444042-121444407	intergenic	0.780	chr1:121401216-121444578	Tmem185b	2 :: TAXCREB(95) SMAD3(201)
6	chr1:182834306-182834438	promoter	1.410	chr1:182829946-182865130	Pycr2	11 :: E2F(26) NRF1(28) MYCMAX(32) ZF5(32) ALPHACP1(83) EBOX(97) MYCMAX(98) XBP1(98) MAX(98) MYC(98) USF2(98)
7	chr10:76446303-76446679	intergenic	1.035	chr10:76424547-76514664	Slc19a1	6 :: IRF1(72) FXR_IR1(100) AR(151) GRE(151) SF1(156) MYOGENIN(165)
8	chr10:76446933-76447294	intergenic	0.867	chr10:76424547-76514664	Slc19a1	3 :: HMX1(83) LDSPOLYA(103) NRF1(126)
9	chr10:94799305-94800027	intergenic	2.425	chr10:94786738-94943373	Socs2	14 :: GATA1(13) STAT5B(156) PAX6(204) GRE(340) AR(341) SOX9_B1(343) SOX(344) OCT(361) COUP_DR1(385) PPAR_DR1(385) NFKAPPAB(397) XBP1(420) FXR(626) ATF3(682)
10	chr10:94880514-94880825	promoter	0.363	chr10:94786738-94943373	Socs2	13 :: STAT1(25) STAT5B(60) CEBPB(79) COUP(99) ERR1(101) MEIS1AHOXA9(103) FXR(105) PXR(105) COUP(106) COUP_DR1(107) FXR_IR1(107) PPAR_DR1(107) E2F(178)
11	chr11:48103820-48104697	intergenic	0.001	chr11:47614030-48619743	Gnb2l1	28 :: E2(33) RFX1(43) NFE2(43) GRE(345) COUP(360) COUP(392) CDX2(398) FXR(398) FXR_IR1(400) PXR(401) AP3(412) FXR(506) ERR1(552) AR(556) FXR(556) FXR_IR1(558) NKX3A(562) COUP(577) SF1(580) SOX(589) OTX(604) XVENT1(678) S8(731) LHX3(731) AR(755) RBPJK(809) CART1(810) COUP(863)
12	chr11:74714303-74714604	intron	0.292	chr11:74710083-74722842	Tsr1	1 :: TBP(69)
13	chr11:74740337-74740446	promoter	0.475	chr11:74720298-74740704	Srr	2 :: GATA1(45) FAC1(105)
14	chr11:101319312-101319414	intron	0.345	chr11:101306849-101320015	Ifi35	2 :: GC(11) CACBINDINGPROTEIN(16)
15	chr11:109334985-109335258	promoter	0.005	chr11:109300303-109351136	Slc16a6	19 :: ZF5(30) E2F(30) ZF5(49) E2F(51) E2(87) TBX5(93) NRF1(105) MYCMAX(107) ZF5(109) E2F(109) STAT1(142) STAT3(142) TAXCREB(160) ZF5(167) STAT1(180) ISRE(184) STAT1(190) ZF5(231) MOVOB(268)
16	chr11:120319593-120319724	intron	0.633	chr11:120317988-120325667	Ccdc137	3 :: R(112) ATF3(123) ER(126)
17	chr12:72238797-72239069	promoter	0.005	chr12:72200350-72410919	Timm9	2 :: POLY(183) AR(223)
18	chr12:80051069-80051774	intergenic	0.009	chr12:79988351-80061217	Plek2	7 :: ALPHACP1(220) PXR(280) AR(326) S8(360) RFX1(378) ROAZ(422) AR(487)
19	chr12:88729421-88730015	intergenic	1.154	chr12:88729183-88786353	Alkbh1, Nrp	10 :: GC(64) GC(103) S8(125) ALPHACP1(125) PAX3(134) SMAD3(258) ELK1(260) MYCMAX(374) TEL2(522) PAX6(528)
20	chr12:88788111-88788326	intron	0.002	chr12:88783431-88790868	1810035L17Rik	3 :: PAX9(46) CEBPB(152) STAT1(154)
21	chr13:49557129-49558444	UTR3	0.002	chr13:49482430-49600173	lppk	20 :: MIF1(18) BRCA(60) BRCA(65) TITF1(361) PAX(420) NFKAPPAB65(421) NFKAPPAB(421) LBP1(429) ER(616) PADS(627) NRF1(636) GC(733) AP1FJ(964) TBP(1059) OCT(1129) BRN2(1143) RBPJK(1181) STAT1(1184) NKX3A(1211) TITF1(1212)
22	chr13:49741889-49742248	intergenic	0.400	chr13:49720078-49776010	Nol8	3 :: LDSPOLYA(141) PLZF(207) FREAC2(208)

23	chr13:49748133-49748246	promoter	1.178	chr13:49720078-49776010	Nol8	5 :: MYCMA(12) NRF1(12) E2F(12) ZF5(13) TAXCREB(76)
24	chr13:107750499-107752100	intergenic	0.006	chr13:107727008-107751294	Dimt1	13 :: ERR1(31) SF1(32) FOXJ2(76) XVENT1(84) SRY(131) NKX3A(194) AP3(214) XFD3(235) RBPJK(422) STAT1(434) PAX6(732) IPF1(779) XBP1(787)
25	chr14:25927428-25928934	intergenic	0.002	chr14:25306269-26278775	Rps24	59 :: SRY(85) PAX2(154) STAF(168) CEBPB(173) ISRE(180) IRF1(180) CART1(188) S8(192) NKX62(192) STAT1(200) STAT3(200) STAT(200) STAF(205) BRN2(211) AP1FJ(218) NFE2(219) GATA1(226) IPF1(286) FXR_IR1(286) MTF1(317) FAC1(322) BRCA(324) XVENT1(410) E2F1DP2(413) ELK1(450) TEL2(452) NERF(453) ETS1(454) STAT1(482) TBX5(704) AFP1(829) IPF1(832) LHX3(832) AR(866) ALPHACP1(886) SOX(887) P53_DECAMER(903) NRSE(936) CART1(964) GZF1(974) PAX3(1052) SRY(1061) FAC1(1064) SRY(1066) FXR(1089) PXR(1089) IPF1(1091) TCF11(1093) ZIC1(1106) TAXCREB(1108) RFX1(1111) E2F(1126) PAX6(1147) AP1FJ(1156) ATF3(1182) ER(1185) AR(1188) SOX(1207) MIF1(1366)
26	chr14:31829127-31829507	intron	0.003	chr14:31825219-31833534	Gnl3	3 :: PAX2(32) FOXP3(58) ATF3(276)
27	chr14:41720265-41720881	UTR3	0.002	chr14:41706263-41804940	Tspan14	6 :: COUP(130) R(180) AR(365) TBP(377) HMEF2(378) IRF1(539)
28	chr14:51407495-51407890	intergenic	0.275	chr14:51405196-51427614	##Ccnb1ip1, NM_001111119	5 :: MTF1(77) NFKAPPAB(112) CACCCBINDINGFACTOR(261) SF1(298) LEF1TCF1(308)
29	chr15:38923294-38923642	intergenic	0.747	chr15:38918882-38944881	Slc25a32	4 :: ER(61) AML(247) PEBP(247) MIF1(274)
30	chr15:80084541-80084655	promoter	0.412	chr15:80083247-80090988	Atf4	1 :: ETS1(80)
31	chr15:88692153-88692317	promoter	0.003	chr15:88657115-88744210	Pim3	8 :: CACBINDINGPROTEIN(67) EBOX(112) MYCMA(113) MAX(113) MYC(113) USF2(113) NRF1(115) NRF1(131)
32	chr16:20611503-20611697	UTR5	0.580	chr16:20610271-20651772	Ece2	9 :: ELK1(71) NFKAPPAB65(74) MYCMA(81) XBP1(81) MAX(81) MYC(81) USF2(81) EBOX(82) GC(127)
33	chr16:78577585-78577740	promoter	0.404	chr16:78377036-78931177	D16Erd472e	3 :: ISRE(54) FXR_IR1(91) MIF1(112)
34	chr17:29270409-29270900	intergenic	0.021	chr17:29183067-29271823	Cdkn1a	10 :: PAX9(31) SF1(117) E2F(185) R(217) COUP(436) COUP_DR1(436) PPAR_DR1(436) COUP(443) COUP_DR1(443) PPAR_DR1(443)
35	chr17:32153431-32154122	intergenic	1.871	chr17:31992862-32257795	Rrp1b	9 :: SRY(20) ALPHACP1(46) BRCA(209) GRE(366) E2(489) ELK1(559) TBP(575) GRE(585) MYCMA(661)
36	chr17:47748716-47748830	promoter	0.818	chr17:47737029-47749929	Bysl	3 :: ER(11) TAXCREB(43) P53_DECAMER(90)
37	chr18:46756637-46757014	promoter	0.005	chr18:46734195-46872283	Elf1a	15 :: STAT5B(10) PAX(14) R(98) PAX6(109) PAX(113) ROAZ(117) MTF1(120) NRSE(196) ZF5(258) PAX9(272) R(272) ZF5(292) E2F(344) MYCMA(346) ZF5(346)
38	chr19:5730139-5730368	UTR3	0.003	chr19:5729654-5740903	Sssca1	4 :: NRF1(135) CIZ(196) FOXP3(198) ALX4(199)
39	chr19:11018739-11019056	intron	1.204	chr19:11017050-11032547	Ccdc86	4 :: COUP(103) COUP_DR1(103) PPAR_DR1(103) CACBINDINGPROTEIN(128)
40	chr19:11031781-11032129	intergenic	1.294	chr19:11017050-11032547	Ccdc86	2 :: BRN2(312) HMEF2(314)
41	chr19:37507776-37508076	promoter	0.006	chr19:37498390-37624901	Hhex	4 :: SMAD3(81) IPF1(86) TBX5(244) PAX6(263)
42	chr19:42008597-42008897	promoter	0.009	chr19:41993180-42009271	Exosc1	5 :: TCF4(105) LEF1TCF1(107) TAL1BETA47(188) TAL1BETAITF2(188) GATA1(228)
43	chr19:45079821-45080087	promoter	0.534	chr19:45079922-45095872	Peo1	5 :: IPF1(106) ERR1(210) SF1(211) FXR(214) ER(214)

44	chr2:10644876-10645895	intergenic	0.005	chr2:10516791-11392901	Prkcq	13 :: RFX1(260) FOXM1(426) PXR(501) ER(709) PAX3(717) AP1FJ(721) MIF1(762) TCF11(771) IPF1(772) STAT5B(848) HLF(909) VBP(909) CEBPB(1015)
45	chr3:69408456-69408959	intergenic	0.194	chr3:69402786-69622974	Nmd3	5 :: FXR_IR1(105) RFX1(107) GATA1(108) MYOGENIN(235) LBP1(236)
46	chr3:84754820-84755451	promoter	0.006	chr3:84509222-85378049	Fbxw7	8 :: FREAC2(190) FREAC2(200) XFD3(201) SOX(340) LHX3(370) AFP1(376) HLF(529) VBP(529)
47	chr3:84769942-84770441	promoter	1.883	chr3:84768978-84770799	Dear1	3 :: HMEF2(323) HMEF2(331) FXR(484)
48	chr4:107473469-107473651	promoter	1.988	chr4:107307792-107552389	Lrp8	3 :: SMAD3(55) AML(144) PEBP(144)
49	chr4:124532075-124532775	UTR3	1.114	chr4:124524945-124532483	Yrdc	4 :: ELK1(80) S8(348) NKX3A(349) NKX62(350)
50	chr4:147976510-147976694	intergenic	0.009	chr4:147961017-147976650	Srm	6 :: STAT3(94) STAT5B(94) STAT(94) STAF(98) GC(116) HNF3(134)
51	chr4:149149810-149149915	promoter	0.004	chr4:149112156-149270372	Slc25a33	3 :: TFIIII(30) ZNF219(32) PAX6(65)
52	chr4:151412496-151412792	promoter	0.518	chr4:151412294-151470821	Nol9	10 :: MYOGENIN(57) LBP1(58) CACBINDINGPROTEIN(97) GC(98) EBOX(190) MAX(191) MYCMAX(191) AML(226) EBOX(252) MYOGENIN(252)
53	chr4:151413116-151413222	promoter	0.138	chr4:151412294-151470821	Nol9	2 :: SRY(9) ELK1(87)
54	chr5:147606844-147607074	promoter	0.661	chr5:147396902-147644718	Usp12	3 :: HMX1(88) FXR_IR1(112) S8(146)
55	chr5:149138945-149139630	UTR3	0.002	chr5:149125669-149316194	Slc7a1	10 :: TITF1(23) PADS(29) PAX3(82) GRE(154) XVENT1(348) LDSPOLYA(398) PADS(472) AML(474) PEBP(474) PAX2(543)
56	chr6:82792732-82793336	intergenic	0.299	chr6:82602868-82861427	Hk2	10 :: ALPHACP1(35) XVENT1(57) ELK1(110) NERF(113) LBP1(123) MYOGENIN(123) ELK1(239) ETS1(243) NFE2(414) TAXCREB(415)
57	chr6:83194538-83195250	intergenic	0.003	chr6:83150447-83274714	Mthfd2	18 :: STAF(90) SOX(175) NKX3A(213) ETS1(231) NFKAPPAB(289) E2F(309) AP1FJ(353) AR(426) FOXM1(484) PLZF(485) IPF1(493) ER(554) SF1(556) ERR1(557) ZIC1(595) AR(615) FXR_IR1(687) ROAZ(710)
58	chr6:91415780-91416198	intron	0.005	chr6:91361365-91424899	Chchd4	4 :: XBP1(62) MYCMAX(62) SRF(339) STAF(382)
59	chr6:122563365-122563467	intergenic	0.005	chr6:122553354-122575228	Gdf3	6 :: ER(29) LEF1TCF1(95) COUP(96) TCF4(96) COUP_DR1(97) PPAR_DR1(97)
60	chr6:127078420-127079466	UTR3	0.685	chr6:127059565-127403705	Ccnd2	27 :: LUN1(82) CDX2(108) FOXJ2(114) GZF1(142) GRE(149) E2F(215) HNF3(371) SOX(391) CEBPB(423) STAT(505) E2(584) STAT1(589) E2(590) TBX5(608) CACCCBINDINGFACTOR(612) FOXP3(638) TAL1BETAITF2(717) NERF(853) E2F1DP2(862) OCT(892) TCF4(938) BRN2(948) SOX(968) P53(991) OCT(995) GATA1(997) E2F(1003)
61	chr6:149233644-149234451	intergenic	3.846	chr6:149104465-149357565	2810474019Rik	11 :: SF1(153) R(186) RUSH1A(241) IRF1(249) PAX3(268) RUSH1A(418) XFD3(528) NKX3A(626) NKX3A(634) PXR(651) CDX2(663)
62	chr6:149334681-149335490	intergenic	3.753	chr6:149104465-149357565	2810474019Rik	9 :: CART1(266) IPF1(270) SF1(318) FXR(321) ELK1(445) LDSPOLYA(528) PAX3(561) MEIS1AHOXA9(568) FOXM1(647)

63	chr8:87225071-87225171	promoter	0.008	chr8:87223710-87231462	Lyl1	1 :: SF1(80)
64	chr8:96909439-96909705	promoter	0.010	chr8:96890011-97048954	Herpud1	7 :: ER(85) ERR1(88) LUN1(132) IRF7(169) ISRE(170) IRF1(170) SRY(170)
65	chr8:109582397-109582507	UTR3	0.357	chr8:109579607-109584427	Nip7	1 :: SRY(46)
66	chr9:34998670-34999185	UTR5	0.076	chr9:34983576-35007459	Tirap	5 :: PAX3(222) EBOX(275) MYOGENIN(275) R(280) ELK1(342)
67	chr9:99012943-99013576	intron	0.429	chr9:98938735-99142681	Pik3cb	7 :: TBX5(133) GATA1(164) TAL1BETAE47(165) TAL1BETAITF2(165) OCT(358) IRF1(371) PAX2(447)
68	chr9:99040833-99041091	promoter	0.161	chr9:98938735-99142681	Pik3cb	2 :: LBP1(112) MYOGENIN(113)
69	chr9:103257644-103258343	UTR3	0.007	chr9:103255432-103326993	Cdv3	22 :: STAT1(7) OTX(17) FOXJ2(25) POLY(29) ALX4(118) RUSH1A(156) PAX6(175) OTX(426) GFI1B(459) STAF(474) P53(506) P53_DECAMER(506) MYOGENIN(535) LBP1(536) AR(541) PADS(542) R(547) CACBINDINGPROTEIN(562) RBPJK(623) XBP1(666) SRF(672) TCF11(684)
70	chr9:109798990-109799748	intergenic	0.366	chr9:109751964-109833781	Cdc25a	12 :: LBP1(199) MYOGENIN(200) STAF(201) P53(211) EBOX(391) MYOGENIN(391) CACCCBINDINGFACTOR(421) MIF1(461) RFX1(462) TAL1BETAE47(556) TAL1BETAITF2(556) TBP(714)
71	chr9:114658149-114658503	UTR3	2.830	chr9:114633042-114665801	Cmtr6	5 :: TBP(80) CDX2(143) NKX62(149) HMEF2(294) POLY(301)
72	chrX:53983994-53984142	promoter	0.054	chrX:53915090-54050873	Fhl1	2 :: HNF3(85) MTF1(137)