

a) Homeobox

N-terminal:

Q9VDA2/53	Dm lhl	KSFSIADILGR
P52952/10	Hs NKX2-5	TPFSVKDILNL
Q8TAU0/10	Hs NKX2-3	TPFSVKDILNL
Q9UBX0/19	Hs HESX1	CSFSIERILGL
Q7KS77/132	Dm lbe	KSFSIADILGH
Q03014/30	Hs HHEX	TPFYIEDILGR
	Hs ENSG00000180053	TPFSVKDILRL
P22809/22	Dm bap	TPFSINDILTR
P05527/277	Dm inv	LKFSIDNILKA
P22711/36	Dm tin	TPFSVKDILNM
Q68DJ5/29	Hs ENSG00000175329	LSFSIEAILKR
Q19937/6	Ce tab-1	SSFSIDDLRG
O95096/8	Hs NKX2-2	TGFSVKDILDL
P78367/10	Hs BAPX1	TSFSIQAILNK
P09082/150	Dm gsb	TSHSIDGILGG
Q9V943/45	Dm CG13424	HSFSIEQILAK
P54366/108	Dm Gsc	SLFTIDSILGS
Q5VZV8/9	Hs NKX2-4	TPFSVSDILSP
Q7KZF6/39	Hs TITF1	TPFSVSDILSP
Q9VEA3/169	Dm CG18599	KSFTIAAILGL
Q09546/153	Ce pax-3	LSYSIDSILGI
Q9NY43/140	Hs BARHL2	SSFLIKDILGD
O15499/18	Hs GSCL	CPFSIEHILSS
Q4ZG44/103	Hs EN1	TNFFIDNILRP
P19622/67	Hs EN2	TNFFIDNILRP
	Hs ENSG00000188909	TSFFIEDILLH
P02836/173	Dm en	LAFSISNILLS
Q04787/40	Dm bsh	TPFSIEHILFQ
P31314/17	Hs TLX1	ISFGIDQILNS
O43711/16	Hs TLX3	ISFGIDQILNS
Q9VFK4/191	Dm NK7.1	TPHSIADILGM
P56915/4	Hs GSC	SMFSIDNILAA
	Hs HMX2	SSFTIQSILGG
	Hs ENSG00000188620	SPFSIKNLLNG
O43763/17	Hs TLX2	ISFGIDQILSG
Q9VDH9/2	Dm CG15696	SDFSIEYILNR
Q9N4L2/35	Ce ZK993.1	TSFSIDTILSN
Q5JSF3/56	Hs NKX6-2	TPHGSIDILGR
Q5BIB4/24	Dm ems	IGFSIESIVGN
Q9W4B2/8	Dm CG4136	TPFAIQEILGL
P10035/72	Dm H2.0	LSFSVDRILGS
P58304/30	Hs CHX10	TGFGIQEILGL
P34326/3	Ce ceh-16	LKFGIERILSS
Q96QS3/25	Hs ARX	SSYCIDSIDLGR
Q7KS72/74	Dm C15	LPFSISRILSK
P78426/94*	Hs NKX6-1	TPHGINIDILSR
Q6NT51/23	Hs BARX2	KTFMTDEILSK
Q9VSC2/219	Dm exex	KSFCIDAILAK
P22807/445	Dm slou	LAFSVENILDP
Q24255/75	Dm B-H1	SRFMTIDILAG
Q9NLC2/44	Ce ceh-24	SKFSVNSILSP
Q9VFAQ3/50	Dm E5	LAFSIDSIVGE
P56407/27	Ce ceh-9	TSHLIKDILDL
P23759/184	Hs PAX7	AKHSIDGILGD
P22808/198	Dm vnd	SGFHSIDILNL
	Hs ENSG00000185610	KSFLIENLLRV
P52951/20	Hs GBX2	TAFSIDSLIGS
Q9BZE3/5	Hs BARHL1	NGFGIDSILSH
Q9W2Q1/114	Dm Rx	PRHTIDAILGL
Q22909/102	Ce ceh-30	SSFRISDILEQ
Q9V552/29	Dm unpg	KPFSIESILAN
Q24256/57	Dm B-H2	SRFMTIDILAG
Q9NP08/17	Hs HMX1	SSFLIENILAA
P54821/32	Hs PRRX1	KNFSVSHLLDL

Q99811/36	Hs PRRX2	KNFSVSHLLDL
P23760/184	Hs PAX3	AKHSIDGILSE
Q23175/365	Ce ceh-32	SKLSIDEILNI
P09083/152	Dm gsb-n	KDYTINGILGG
P50219/5	Hs HLXB9	KNERTIDAILAV
	Hs ENSG00000109851	LKFGVNAILSS
P26797/1	Ce ceh-19	MAENIESLLEK
P41935/24	Ce ceh-10	MSEAIHEILGI
Q9NZR4/29	Hs VSX1	RGEAITDILGL
Q18533/49	Ce mls-2	IKFNISELLED
Q9Y2V3/31	Hs RAX	RIHSIEAILGF
Q9NZ75/42	Hs HLX1	PSECIADILHA
Q8T0H1/132	Dm Dr	SNFSVASLLAD
Q9W1U7/58	Dm CG9876	HRFSVDNIMEM
Q9W2P8/35	Dm hbn	AVYSTIDQILGN
Q04741/8	Hs EMX1	RGETIESLVAK
Q8IUT7/7	Hs NKX2-8	LSFTVRSLLDL
P35548/45	Hs MSX2	LPFSVEAIMSD
O01962/3	Ce ceh-2	LKFSVERLVDS
Q04743/8	Hs EMX2	ROFTIESLVAK
P20265/193	Hs POU3F2	PSFTVNGMLGA
Q09604/12	Ce vab-15	GIESVESLLET
Q6NT76/20	Hs NP 078843	PRFTIEQIDLL
O17978/26	Ce cog-1	STYSINGILLE
P49335/137	Hs POU3F4	PGFTVSGMLEH
P20264/226	Hs POU3F3	GGFTVNGMLSA
P28360/110	Hs MSX1	GHFSVGGILLKL
P17487/2	Ce ceh-12	MFSSIDSILKI
Q9UIW0/175	Hs VAX2	EAFATSNILRL
P53547/116	Ce ceh-1	TTFENLQILMP
P20009/102	Dm D11	DDCSIDKCED
Q17788/45	Ce C07E3.5	EIESIGESLSV

C-terminal:

Q69YW8/184	Ce R03E1.4	IFFTIDNILS-
Q9VX20/372	Dm OdsH	SPFSISILLGS
P29506/172	Ce unc-4	FESIDSILAV
O77215/416	Dm unc-4	NFSIESLLFN

Non-bilaterian:

Q6VT85/49	Sponge-hox	CSFSIASILGD
Q7YZD2/11	Cnidarian-hox	TPFSITDILSR
Q70HR3/7	Ctenophore-hox	LSFSIDQILGL

b) PAX (no homeobox)

P23757/306	Dm Poxm	SSHSVSDILAH
Q02548/177	Hs PAX5	SSYSISGILGI
O16117/401	Dm sv	TCYSINGILGI
P55771/194	Hs PAX9	SSHSVTDILGI
P15863/194	Hs PAX1	SAHSVSNILGI
Q02962/183	Hs PAX2	GSYSINGILGI
P23758/358	Dm Poxn	NPYSTIEELLKK
Q21263/289	Ce pax-2	TTHSINGLLGT
Q17627/227	Ce egl-38	TAYSINGLLGT
Q06710/178	Hs PAX8	STYSINGLLGI

Non-bilaterian:

67527267/158	Trichoplax-pax	CHYRINDLLGI
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