

Additional File 7

Gene	Reference	Sequence	Denature	Anneal/ time	Extend/ time	Acquis/ time
Goosecoid	Xanthos et al, 2002	U: 5'-TTC ACC GAT GAA CAA CTG GA-3' D: 5'-TTC CAC TTT TGG GCA TTT TC -3'	95	55/5	72/11	82/3
ADMP	Sander et al, 2007	U: 5'-GAT GAT GGA AGG AGA GGA-3' D: 5'-TCA TGT TCT GAC CCA AAG-3'	95/30	55/60	72/30	
Chordin	XMMR/Xanthos 2002	U: 5'-AAC TGC CAG GAC TGG ATG GT-3' D: 5'-GGC AGG ATT TAG AGT TGC TTC-3'	95	55/5	72/12	81/3
Noggin	XMMR/Xanthos 2002	U: 5'-AGT TGC AGA TGT GGC TCT-3' D: 5'-AGT CCA AGA GTC TGA GCA-3'	95	55/5	72/12	84/3
Follistatin	Agius et al, 2000	U: 5'-CAG TGC AGC GCT GGA AAG AAA T-3' D: 5'-TGC GTTGCG GTA ATT CAC TTA C-3'	Unreported			
Eomesodermin	Thomsen Lab, unpub	U: 5'-TCC TGT CCC CAC AGA CTA ATG-3' D: 5'-TGA AGG ACT TGA CCT TGA GGA-3'	95	55/5	72/12	81/3
Mixer	Henry and Melton 1998	U: 5'-CAC CAG CCC AGC ACT TAA CC-3' D: 5'-CAA TGT CAC ATC AAC TGA AG-3'	95	55/5	72/12	83/3
Mix.2	Xanthos et al, 2001	U: 5'-TGC AAG CCA TCA TTA TTC TAG C-3' D: 5'-AGG AAC CTC TGC CTC GAG ACA T-3'	95	55/5	72/11	83/3
Xsox17	Xanthos et al, 2001	U: 5'-GCA AGA TGC TTG GCA AGT CG-3' D: 5'-GCT GAA GTT CTC TAG ACA CA-3'	95	58/5	72/8	85/3
Xbrachyury	Sun et al, 1999	U: 5'-TTC TGA AGG TGA GCA TGT CG-3' D: 5'-GTT TGA CTT TGC TAA AAG AGA CAG G-3'	95	55/5	72/9	75/3
ODC	Cao et al, 2006	U: 5'-CAA AGC TTG TTC TAC GCA TAG CA-3' D: 5'-GGT GGC ACC AAA TTT CAC ACT-3'	95	55/5	72/5	
Xvent1	Gawantka et al, 1995	U: 5'-GCA TCT CCT TGG CAT ATT TGG-3' D: 5'-TTC CCT TCA GCA TGG TTC ACC-3'	95	62/5	72/20	83/3
Xvent2	Kofron et al, 2001	U: 5'-TGA GAC TTG GGC ACT GTC TG-3' D: 5'-CCT CTG TTG AAT GGC TTG CT-3'	95	62/5	72/20	83/3
Msx1	DeRobertis, unpub	U: 5'-GCT AAA AAT GGC TGC TAA-3' D: 5'-AGG TGG GCT GTG TAA AGT-3'	95	55	72	
Xhox3	Suzuki et al., 1995	U: 5'-ATA TGA TGA GCC ACG CAG CAG-3' D: 5'-CAG ATG CTG CAG CTC TTT GGC-3'	Unreported			

Agius, E. *et al.* 2000. Endodermal Nodal-related signals and mesoderm induction in *Xenopus*. *Development* 127: 1173-1183.

Cao, Y. *et al.* 2006. *Xenopus* POU factors of subclass V inhibit activin.nodal signaling during gastrulation. *Mechanisms of Development* 123:614-625

Gawantka, V. *et al.* 1995. Antagonizing the Spemann organizer: role of the homeobox gene *Xvent-1*. *The EMBO Journal* 14 (24):6268-6279.

Henry, G.L. and D.A. Melton. 1998. *Mixer*, a Homeobox Gene Required for Endoderm Development. *Sciec*: 281:91-96.

Kofron, M. *et al.* 2001. The Role of Maternal Axin in Patterning the *Xenopus* Embryo. *Developmental Biology* 237:183-201.

Sander, V. *et al.* 2007. The opposing homeobox genes *Goosecoid* and *Vent1/2* self-regulate *Xenopus* patterning. *The EMBO Journal* 26:2955-2965.

Sun, B.I. *et al.* 1999. *derriere*: a TGF β family member required for posterior development in *Xenopus*. *Development* 126:1467-1482.

Suzuki, A. *et al.* 1995. Bone Morphogenetic Protein acts as a ventral mesoderm modifier in early *Xenopus* embryos. *Development, Growth, & Differentiation* 37:581-588.

Xanthos, J.B. *et al.* 2002. The roles of three signaling pathways in the formation and function of the Spemann organizer. *Development* 129:4027-4043.