

**Table S1.** Primers used for isolation and cloning of *Tbx20*, and the generation of *Tbx20*-EGFP transgenic constructs

Primer description	Primer sequence
<i>X. laevis Tbx20</i> exon1/forward (for BAC screen probe)	5'-CCA CTG TCA CAG CTC GAA CAT AGA-3'
<i>X. laevis Tbx20</i> exon1/reverse (for BAC screen probe)	5'-CCT TGG GTG TCC CAC TTG ACA TTA-3'
<i>Tbx20</i> 5' deletions (-1969)/forward	5'-CGC CGA ATT CAT GAC ACT TAC CAG ATA TG-3'
<i>Tbx20</i> 5' deletions (-1483)/forward	5'-CGC CGA ATT CTG TAT TTA GCG CAC CTA-3'
<i>Tbx20</i> 5' deletions (-944)/forward	5'-CGC CGA ATT CCC GTG AGG GGC AGT CAA-3'
<i>Tbx20</i> 5' deletions (-334)/forward	5'-CGC CGA ATT CCT GCC CTA TTT GAT CAG C-3'
<i>Tbx20</i> 5' deletions 3' end/reverse	5'-CGG TGG ATC CAC TTC CAT-3'
<i>Tbx20</i> (-251)/forward 5' end	5'-CTT CTC TTA TGT CAC GTG TGC-3'
<i>Tbx20</i> (-81)/forward 5' end	5'-GTG ACG CTG CAG GGC TCC-3'
<i>Tbx20</i> (-251-81)/reverse 3' end	5'-CCG GTG GAT CCA CTT CCA TG-3'
<i>Tbx20</i> elimination of 334 bp element/forward	5'-CCG AAT TCT CAT AAA GCA GCT TATG-3'
<i>Tbx20</i> elimination of 334 bp element/reverse	5'-GTG GAT CCG ATA TTT TAA TAA ATA AAC-3'

**Table S2.** PCR primers used in 5' RLM-RACE

Primer description	Primer sequence
<i>X. tropicalis Tbx20</i> -specific 5' primer	5'-AGC AGC TTA TGG TAG GGT TTC T-3'
<i>X. tropicalis Tbx20</i> 5' RLM-RACE inner	5'-CTT TCA GCA TTC ACA CGC TTC A-3'
<i>X. tropicalis Tbx20</i> 5' RLM-RACE outer	5'-TGT ACT CAT TCC CGA CAG CGT-3'
<i>X. tropicalis Tbx20</i> -specific 5' primer (2)	5'-ACT GTC AGA GCT CCA ACC TAG ACT-3'
<i>X. tropicalis Tbx20</i> 5' RLM-RACE inner (2)	5'-AGA GGG TGT GTA TTC CAT GCT GGA-3'
<i>X. tropicalis Tbx20</i> 5' RLM-RACE outer (2)	5'-TGC TCT CCT GTG TCT CTT TGT CCA-3'

**Table S3.** ChIP primer sequences

ChIP primer	Primer sequence
<i>Xnr6</i> inner/forward	5'-GGT AGA TGA AAG GCT GAC AGG TGT G-3'
<i>Xnr6</i> inner/reverse	5'-GGC TGT TGA AAA CTG AAA TGA AGC-3'
SMAD1 sites/forward	5'-TTT CTC TCG GAG CCC AGT GA-3'
SMAD1 sites/reverse	5'-GCT GAT AAG TGT CTG GGA GG-3'
Non-canonical SMAD1 site/forward	5'-ATA GGA TCT GTG TGG CCA TG-3'
Non-canonical SMAD1 site/reverse	5'-CTG ACA GTG GCC AGG AGA TT-3'

**Table S4.** Dissociation constants ( $K_d$ ), standard deviation and nucleotide sequence for each oligonucleotide analyzed in fluorescence polarization studies

Oligonucleotide	$K_d$ (mM)	Standard deviation	Oligonucleotide sequence
xVent	7.829	0.7465	AGAGAGAACATGTTAGCATACAAATAGC
SRF site	13.59	0.6407	AGCTTCTTACACAGGATGTCCATTAGGACATCTGCGTCAGCAA
Oligo 21	6.535	0.2181	CTATTGATCAGCAAACGAGATGGATTACA
Oligo 20	8.512	0.3635	ACGAGATGGATTACAGATGAGCATCCTTAG
Oligo 19*	3.758	0.2244	GATGAGCATCCTAGATTACTCTAAAAGCC
Oligo 18	9.539	0.4817	ATTACTCTAAAAGCCCCGCCCTCTTTAT
Oligo 17	5.631	0.4146	CCGCCCTCTTATGTCACTGTGCTTT
Oligo 16*	2.848	0.08203	GTCACGTGTGCTTTTTAGTAAGTCTTT
Oligo 15	8.428	0.1427	TTTAGTAAAGTCTTTCTCGGAGGCCA
Oligo 14	9.473	0.7696	TTCTCTGGAGCCAGTGAGAAAAAGAAGT
Oligo 13*	3.56	0.19	GTGAGAAAAAGAAGTAGCTGGCTGATCCT
Oligo 12	9.128	1.409	AGCTCGGCTGATCCTATCTGCCCTGCTCC
Oligo 11	6.382	0.6181	ATCTGGCCCTGCTCCATCCCTGCTGCCCTT
Oligo 10	5.97	0.598	ATCCCTGTCGCCCTCATTCATTGCCGTG
Oligo 9*	2.836	0.3847	CATTCAATTGCCGTGCTCCAGCCGCCACCT
Oligo 8*	2.078	0.2239	CTCCAGCCGCCACCTCCCAGACACTTATCA
Oligo 7	5.566	0.4806	CCCAAGACACTTACAGCTGTATCAGGCAGA
Oligo 6*	2.402	0.1846	GCTGTATCAGGCAGATGTGACGCTGCAAGG
Oligo 5	7.201	0.5312	TGTGACGCTGCAGGGCTCAATTGGCCAGG
Oligo 4	8.436	0.3279	CTCCAATTGGCCAGGAGAGAGATAGGATCT
Oligo 3	10.03	0.4913	AGAGAGATAGGATCTGTGTCAGAACAT
Oligo 2*	3.106	0.1021	GTGTGGCCATGAAATTAGGAAGCAGAGG
Oligo 1	14.03	1.1	TAAGGAAGCAGAGGCTGAGAATGGAACAG

\*Oligonucleotides bound by SMAD1.