

Table S1. PCR primer used for PCR reactions

Gene	Sequence	Position	Accession number
GAPDH (forward)	5'-AAGCCACCATCAAGAAGG-3'	882-899	KM217385.1
GAPDH (reverse)	5'-CCACCAGTTTCACAAAGC-3	1023-1040	KM217385.1
HSP60 (forward)	5'-ACTATCATCTCGCCAATCG-3'	74-92	ON814140*
HSP60 (reverse)	5'-TTATCCACTCCACTCAACATT-3'	173-193	ON814140*
HSP70 (forward)	5'-TGTCAGTTCAGCAGTAGTG-3'	536-555	ON814141*
HSP70 (reverse)	5'-TGTCAGTTCAGCAGTAGTG-3'	636-657	ON814141*
HSP90 (forward)	5'-ACCGCATTTCATCGCTTGG-3'	298-316	ON814142*
HSP90 (reverse)	5'-GCTTCATCGTCACCTTCTTCC-3'	385-406	ON814142*
NOS (forward)	5'-CCACACTCTCCATAGCATTCT-3'	378-392	ON814144*
NOS (reverse)	5'-CCGTCCTCSGCGTAACAC-3'	487-505	ON814144*
TNF (forward)	5'-AGAAATCGCCAGAAGCAAGTTG-3'	210-230	KR072662
TNF (reverse)	5'-GATGAGCACATTGATAGCAGACC-3'	264-286	KR072662
Bcl-2 (forward)	5'-ATATTCACCAAGCCAATGC-3'	366-384	MF380423
Bcl-2 (reverse)	5'-CCAGACACCACTCTATCG-3'	525-542	MF380423
Msi-1 (forward)	5'-ATTGGAATGCTTAGTGAAATGC-3'	428-449	MH687926
Msi-1 (reverse)	5'-GTGTCTACCTTGCCATTGC-3'	598-617	MH687926
Wnt (forward)	5'-AGTGTGATGCTGTTAGTGA-3'	793-822	ON814145*
Wnt (reverse)	5'-TGCGACATTGACCTTCTATA-3'	888-908	ON814145*
Fibrillar collagen	5'-GTCATCCAGGTCGTCAAG-3'	1306-1323	KR072664
Fibrillar collagen	5'-TAGGTCAATCTCTAATTCAGC-3'	1482-1502	KR072664
FGF (forward)	5'-CCTTCGTATCTTAGAGAATGGA-3'	229-251	ON814143*
FGF (reverse)	5'-ATGTTGCGGAACCTTGAGA-3'	324-342	ON814143*
Tgf3 (forward)	5'-TGCCAATACCGTCCAAGTC-3'	320-338	MH687919
Tgf3 (reverse)	5'-TGCCTTCCTCCTCCTCTG-3'	493-510	MH687919
Tgf4 (forward)	5'-CATGAATGAAGCAATATCAACTG-3'	6-28	MH687920
Tgf4 (reverse)	5'-ATTTATTGTTTCGTGGTTTCTTTAC-3'	166-189	MH687920
Tgf5 (reverse)	5'-ATTTATTGTTTCGTGGTTTCTTTAC-3'	134-153	MH687921
Tgf5 (reverse)	5'-AGTCCTTTCGTCTTTCCTTATCG-3'	189-211	MH687921
Tgf6 (forward)	5'-CCACCTCTGAACAACAACAATAAC-3'	483-506	MH687922
Tgf6 (reverse)	5'-CTATGAGCACGGCAGCAAAG-3'	593-612	MH687922

* In case the publication data of the present article is previous to the genebank sequence release, the FASTA sequences are reported below.

>Hsp60

GGACGCACGTTTTAGCTGTAACTGGTTTATCGCCGACTGTAAAGCAATGCAAGCTCTGA
GACATTTTTATCGACTATCATCTCGCCAATCGATGCGGAGTGCTCCTAGAATGGTGACTC
CTTGCGGATACTACGCTAAAGACATCAAGTATGGTGCAGAGGGTAGAGCTGAAATGTTGA
GTGGAGTGGATAAACTGGCTGATGCTGTTGCAGTAACTTTGGGCCCCAAGGTACAGAGTG
TGGTAACACAGAGcAGGATACACACATATGACATAGTAGTATGCTCGTCGAAAGGGGAAA
aCCGaGCAAGGAAGCGTCCATCCATCCATCAATAGCCTAATtAGCcGGACCAATTTGCCT
ATATGGCCAACTAATAGGAGAGCCAGATAaCATTATtACATAgAATAATAGAGGTGGGA
GGATGAGATtAgTATAAAAGTCCATGAaGA

>HSP70

AATATAGAACTCAGTaAAAGATGGCGGaAAGAACAAAGGATGGTACTATTTATCaCGATAGTAATCCATCTCCTGAAGGC
CAACTAATCGGATCTGATGATACTGACCCAATACCAAAGCAATCAGACTATGCGaTAATAGGAATAGATCTGGGTACCAC
tTATTCGTGTGTTGCTtATTTGGGAGAAGCATCGTCTACAGTGATTGCaAATAACATGGGCAATCGAACACGCCTTCTT
GGGTCAGTTTTTCAGGagGGGAACGTATTTGTTGGAGAAGCGGCGCTCAATAAGGGACTAAGGTTCCCAAAGAATACGGTT
TATGATGCCAAAAGAAtgatAGGTAGACGCCTTGATGAACCTGCAATTCAAGATCGCTTGAAGAATTGGCCCTTcGCGGT

TGTCCAACATAGGAATAACTGCGCCTTTGAATTGGAATGTAACCATAACCAGAAAGATATTCTGCTTCCGGAGGAAATAT
CAGCTTATGTGTTAGTCAAGATGAAGCACACTGCAGAGGACTATCTTGGtCATTCTGTCTAGTTTACAGAGTAgTgACGGTg
CCAGCTTACtTCAACGACTCACAGAGGCAGGCaACCATTGACGCATGCTATGTTGCCGGGCTTAAGGTGGAACGTATTAT
CaACGAGCCaCaCAGCTGCTGCCCTTGCTTACGGTTTTAGAGAGAAATGCCGGGGCCATgGGAGCCaAAACACTACTGGtGT
ATGACTTGGGAGGAGGTACACTGGATGTCACTGTGATGACTGTGGATCGTGGAGtGTTTGAGGTGCTAAGTACATGTGGT
GACACTCAGCTTGGTGGTCAAGACTTTTGATGCCAACTTAGTGGATCACTTCACCGAGGAGATAAAAGaAAAGTTGGGGAA
AGATATTTCCAATAATTTGAAGGCACTTCGcAAATTGAAAGATCACTGTCAACTTTTAAAGCACAGTCTGTCCCACTCTG
ATGTTGCTACTCTTGAAGTGAAGGGTTAATTGATGGTGAGGACTTTGAATCTTCACTCTCTCGTGAGAAATTTGCAGAA
ATTAATCAGTCATTGTTTGACCGTTGCATGAAGCCGATAGGTACAGCCCTAAGTGATGCGGGAATTGGGAAAGAAAATAT
ACATGAGGTTATCTTGATAGGCGGATCTACAAGAATACCAAAGGTCCAGCAGCtTTTGGGGGAATACTTTTCAGAAGTTG
CCATCAGCAAGCGCATTAATCCGGACgAAGCCaTTGCAATGGGTgCTGCCATACAAGGTGCC

>HSP90

CAGTGTCAAATCGCCTCCAGCAATCACCCCTGCTGTATAGTTACTAGCCAGTATGGGTGGACTGCTAATATGGAACGCATT
ATGAAGGCACAAGCATTGCGTGATTCTTCAACAATGGGCTACATGTcGCAAAGAAGCAGCTAGAAATCAACCCGGACCA
TCCAATCATGGAAAACCTGAAGcAAAAGTTGAGGCTGACAAGAATGACAAAACCTGTCAAAAATTTAGTTTTCTCCTCT
ATGAAACTGCTCTCTTGGCATCCGGTTTCATGTTGGAGGATCCCCAGGTGCATGCCAACCGCATTTCATCGCTTGGTTAAT
TTGGGCTTGGGAATTGATGAGAGTGAGACAGTTGAAGATGACGTGCCTCAAGATATGCCATCACTGGAAGAAGGTGACGA
TGAAGCTTCAAGAATGGAAGATGTTGACTAACAACATAATTATTGGTTATGTAACCTTCTAATATGATATAGCTCTAATCA
ACTTGTCGCAAAATATTTAGATTTAATTGTAAGCAAAAAAGGTCTAAATGATTACAGAATTCAGTTGCTATTTATaaaA

>FGF

gATCCCTGAATCAGCCATTTTTCGACTCGCTTGTAAtTTTAtCTCCaTCCCTGTTTAtAGAGATCGGAAGAATGTGCTTG
GAAAGCTATTTGGTGATATTGGAAAGTCTGTTGAGAAAGCTGCTAAAGATGTGAGAAGGACATCGACAAATCAATCCAC
ACAATCCCTCAAAATGCATTGCAGAATGGAAATATTGTGAAACTTAGGTCAAAATCTAACAATAAGTTCCTTCGTATCTT
AGAGAATGGAACAATTGACTGTTTCAAGGAGACGGAGGATCAAGCTgTgAGTaCTTGGTGATtgCTTCGATGGAGCACCCCTG
GCAGTCTCAAGTTCCGCAACATGGCAAACACCTTGTGGTACCTTGGTCTtGTTCAgGGGggCCCAACCcTGCcAaaCCAA
CCGCCCTCCCATCTACCTAGCCGCTTCTGGTGGAGGACCAGAATGTGACTTCCTTCCTTCGATGCAGTTGGATAACTTTGT
AGCCCTCCAGTCCCTCCAGTTCCCTGGATCCACATCGGTGCCCTTCCAGCGGCCAGGTTACCTCCCCAACCATGACCC
CTGCCACCAGTGATGCTGCCTTCTTTAAGGTTGTGTTTCTaAGAAAACAATTTTAAACTGCAAGaAAATGCTAATTTCTG
CGTGTTCGATCACAGTGGTGAAATACTGTAGCTCCTATGCATAATATATAAACTTTATACATATTTGTTGGCTAAGATA
TTTTGATAGTAATGTAGACTGCATTCAGTTAATGTTTCATATTGtGAAAAAAtTAAGTTTgaTatC

>nNOS

GCAGCGGATTCAGAtTTGCAGAATGGAGAtgAGGGTAtTCCCctAgTCAGCAGaCaCGTTTCAAGTCAAGTCACTCATGTGA
tCaTGGTCAGATCATtCaTGAGATGTTGAAGGCCTcTaGtGAGTTTgGGTCCATGTACCTCTTCTTTGGCTGCCGACAGA
GTACACTGGACCAcGTCTAcAAGGATGAGATGGCGAAAGCTTGCATGTTTGGAGcAGTGGAGAAATGTTATGTTGCACTT
TCAAGAGAAcCCAACCAGTCAAAGAtGTATGTTCAAGATAAGCTGAAGGAGGAAGCTGATACTGTTGTCCAGTTaCTCAT
TGCTAGAGGAGcTCACTTCTATGTCTGTgGGGACATCTCaATGGCCAATGATGTTTCCCACTCTCCATAGCATTCTGA
CTCACAACGCTGCCATGACCGACCAAGAGGCCAGAAGCTTTGTGACTGGAATGAAGGAAAATGGCACGTACCATGAAGAC
ATTTTTGGTGTTACGCTGAGGACGGCAGAAGTTACTGATAGATTTAGGACAGCTGCTAGAAGAAATGGCAAGTCCAAC
TAGTAAGACAAGTGTCACAATAGGAGAAGAGTGTTCAGGTGAAGGAGCACAGACCAGTAGTGACAGCAGTGCAGCTGC
TCGCTAGACATGaCGTCCCAACACAAATTAGTTACAGTTTGAAGGACAAGACACTCCCTTCTGGAAGAAAGATCTCTCAG
CATTCACACAGTGGACACCTTGTGTATTGAGATGActTTGAGAGACACCTTCCAAGTTATAGTTGCCATAGAAATAACAT
GCTTTAAATGGTTTAGCATATAtTTTCTGATTTCTGTGTACACTTTAAATCCATAGTCATTTTTTACGTGCATGCTTATTGC
ATGTACATaATaaa

>Wnt

AAGTTAATAGAATCTAATGCAAACCTCTTTGCTTTggaTGTAACCTATTgCTCATCAGTTgagATCAGAGAGGGGTTGGAG
GAAACTAGTGAACGGAACCTGTATCAGATACCTTCACTGCGCACTGCAGCATTAtGGTCACTATCACTGTGACATGCTGC
CGTTGTTTGAACCTTGGCAGTTTACATCACCAAAGGTAtTTGGTAAACATTAAAGCTGCGTTTTAtTCCTCTGAATGACTTG
ATGGAAGAGTTCAAGGGACTGTCACAATTGTCTGATGTCTCTCTCATGGAgATACATCAGACCAAAGGCTTCACTCAGGT
CTGGTGGACACTCAAGTCCGGGCTCTTTCCCATCACTGGACTCCTCCTAGCTGTGTTTTATTTGGAACTAGGTTACAGAC
AGAGGACACTTCTAGAGGGAGCTCTTATCTTTTTTGGGAGCTGCAGTCACTGGTTTGGGAGTTCCTGTGGAAGTGTATCT
CTGTACTATGACTGCCCTTGGTTAATAGTCTTCAATGATGTCCGAGTTGGTCTTGTAGTGCTAGCCCTCTCTGCCTACTG
GGTCATATTCAATTGGAGAGCATTCTAAGGTGTCAACCTTGGACCATACACTGGGGAAATATTGGAAAGAACTGGCTGCAG
CCTCCCTTGGGTGCATTGTACTATTTGTGTATGAATTTTGTGAGCGAGGCATTCAAGTcGTGTATCCCTTCTTCAGTTTa
TGGTCAACTCCACACACTCAACTAATGGCAAATGTGTTTCTAGCAATATCCATCACTGCAGCAGCATTGTACAGTGTGAT

GCTGTTAGTGAGATTGGTGTCTAGTGTGGTTGAGTGTTCCTGAGAAGGAGAAAGTGCTGGAAGGTATGGCAGAGATGCCCA
AAGCAGCTTATAGAAGGTCAATGTCGCAATTCAAGTTCCTCTTGACCATGTTGACAATAACAGCTGCAGTCACTTTATCA
ACTTTCATACCAACTGAGATACATGACTTTGGAATGGAGGCTTCAGCCGCAACCATGTCCGTATACAGTGGTATACTGAC
AGGGAGTTATGCCCTTTGGAATGTGTATACTGTGATAGTCTTAGTGGAGCACATAATCGGGGTTCAAGATCTGTTTCGTT
TAACTTaATGTGCTAGTCGCTCACAGTaGCTACTTTGTGTGGTTGTTAGTGGAGACCAATTGCTACTATGTTGTGCACAT
GTGCTCTTGTGATGCAGATAAGTCCAGATTGATTGGATATACAGCAGAAAGACTTTTAAACAAAGGCTCGCAAGAATAGA
CACTTATGCTACATTGTCACTTACTTCAGTATCAAGTATACATGATTATGTTAATATGAATACACTGAGTAGAGTGATGT
GCTTTGAAGTGTTCTATTCTCCTg

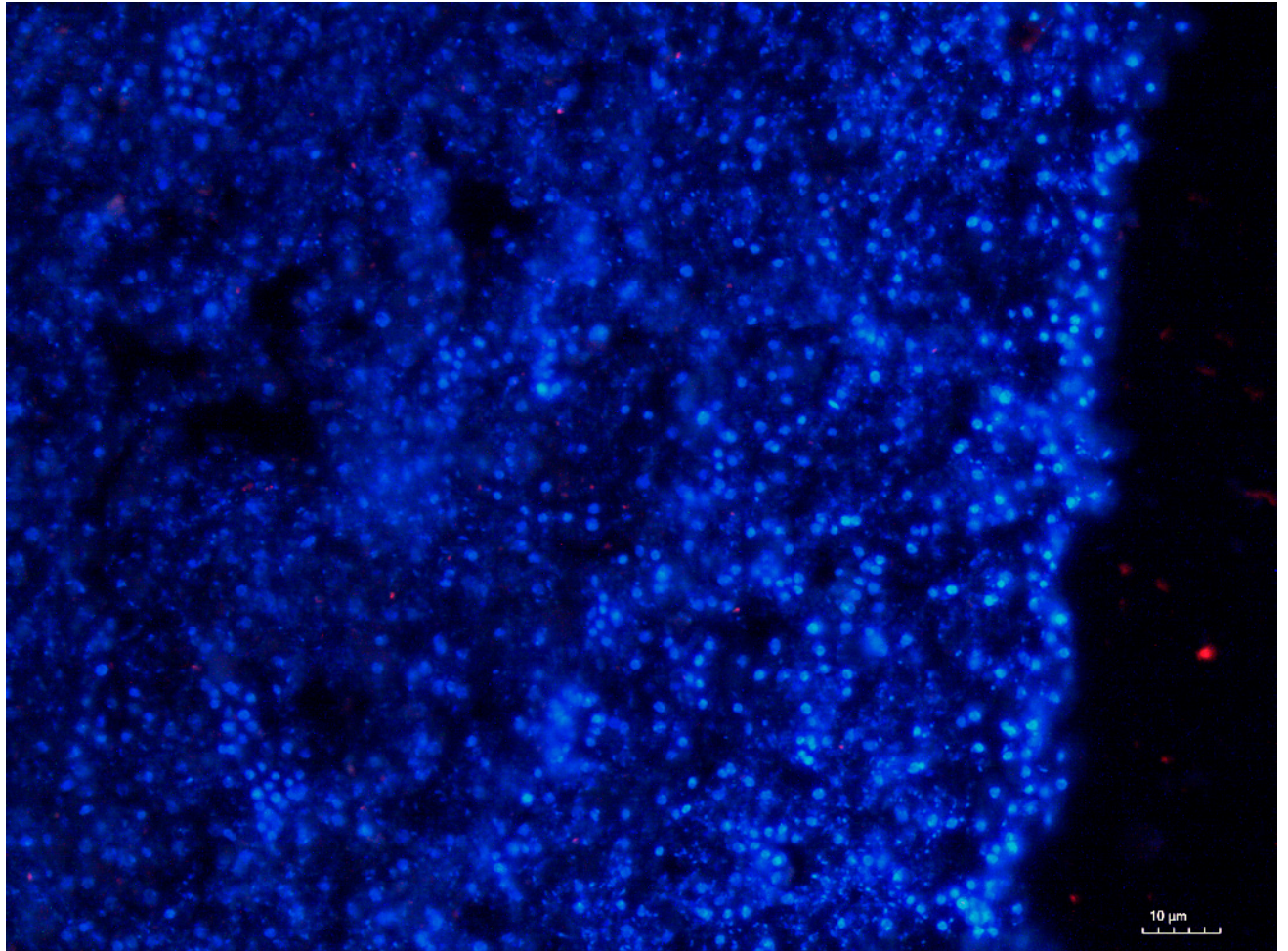


Figure S1. Negative control of Figure 3. Histological sections showing the regenerating edges of *Chondrosia reniformis* fragments 24 h after being cut.

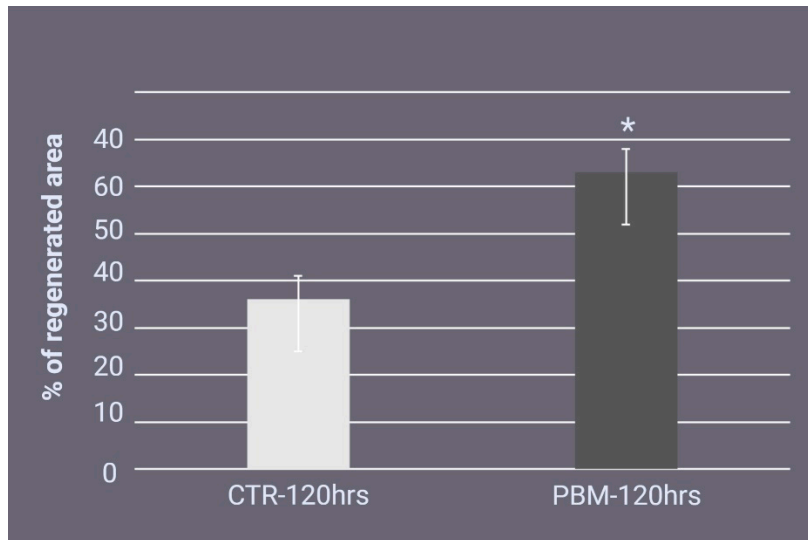


Figure S2. Percentage of regeneration at 120 hours (hrs) from cutting. The asterisks indicate significant differences between groups based on the t-student test, * $p < 0.05$. The program ImageJ was employed to investigate surface areas [69].