

Differential microRNA profile underlies the divergent healing responses in skin and oral mucosal wounds

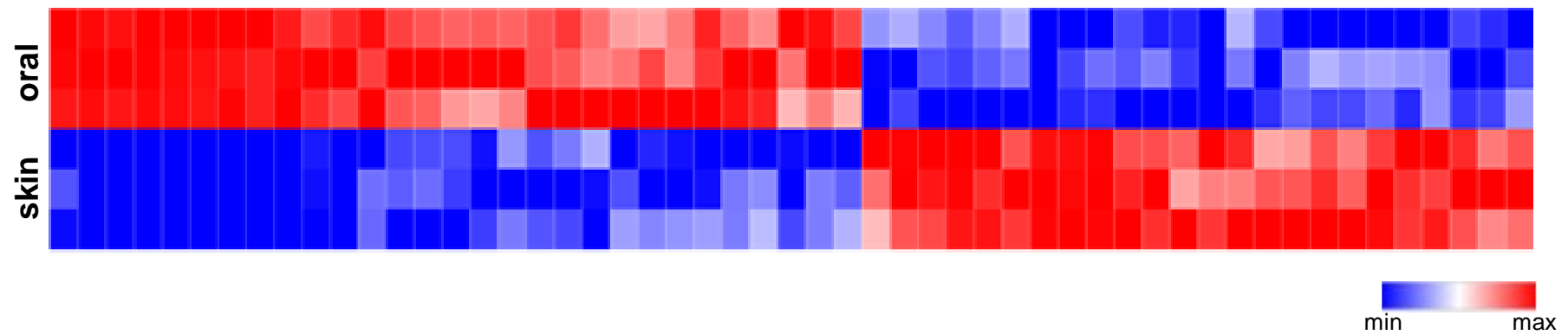
Alyne Simões^{1,2}, Lin Chen¹, Zujian Chen³, Yan Zhao¹, Shang Gao⁴, Phillip T. Marucha^{1,5}, Yang Dai⁴, Luisa A. DiPietro^{1,6,*}, Xiaofeng Zhou^{1,3,6,7,*}

1. Center for Wound Healing & Tissue Regeneration, Department of Periodontics, College of Dentistry, University of Illinois at Chicago, Chicago, IL, USA.
2. Oral Biology Laboratory, Department of Biomaterials and Oral Biology, School of Dentistry, University of São Paulo, São Paulo, SP, Brazil.
3. Center for Molecular Biology of Oral Diseases, Department of Periodontics, College of Dentistry, University of Illinois at Chicago, Chicago, IL, USA.
4. Department of Bioengineering, College of Engineering, University of Illinois at Chicago, Chicago, IL, USA.
5. College of Dentistry, Oregon Health and Sciences University, Portland, OR, USA.
6. Graduate College, University of Illinois at Chicago, Chicago, IL, USA.
7. UIC Cancer Center, University of Illinois at Chicago, Chicago, IL, USA.

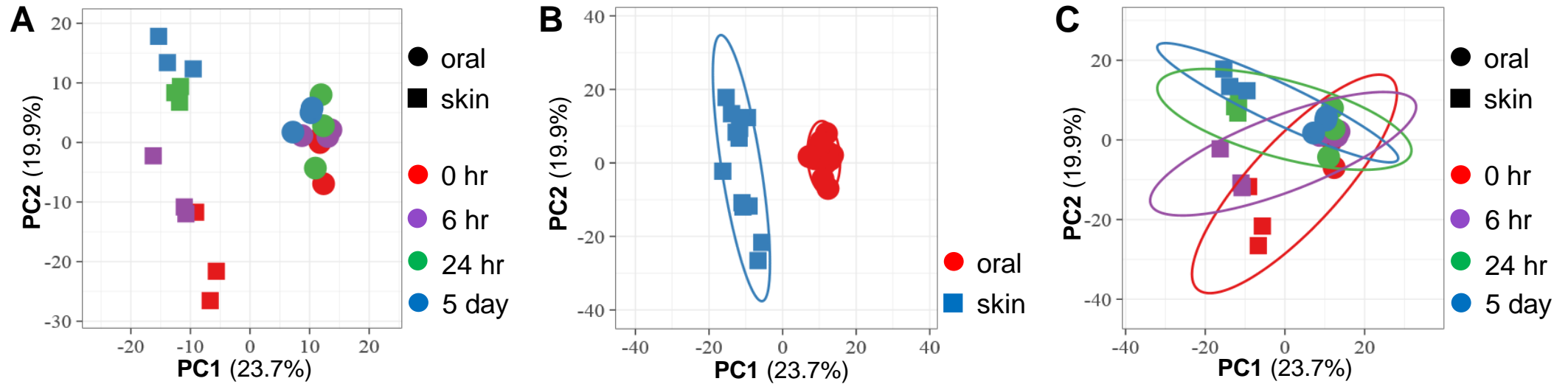
* Co-corresponding Authors:

X. Zhou, University of Illinois at Chicago, College of Dentistry, 801 S. Paulina Street, Chicago, IL 60612, USA. Email: xfzhou@uic.edu

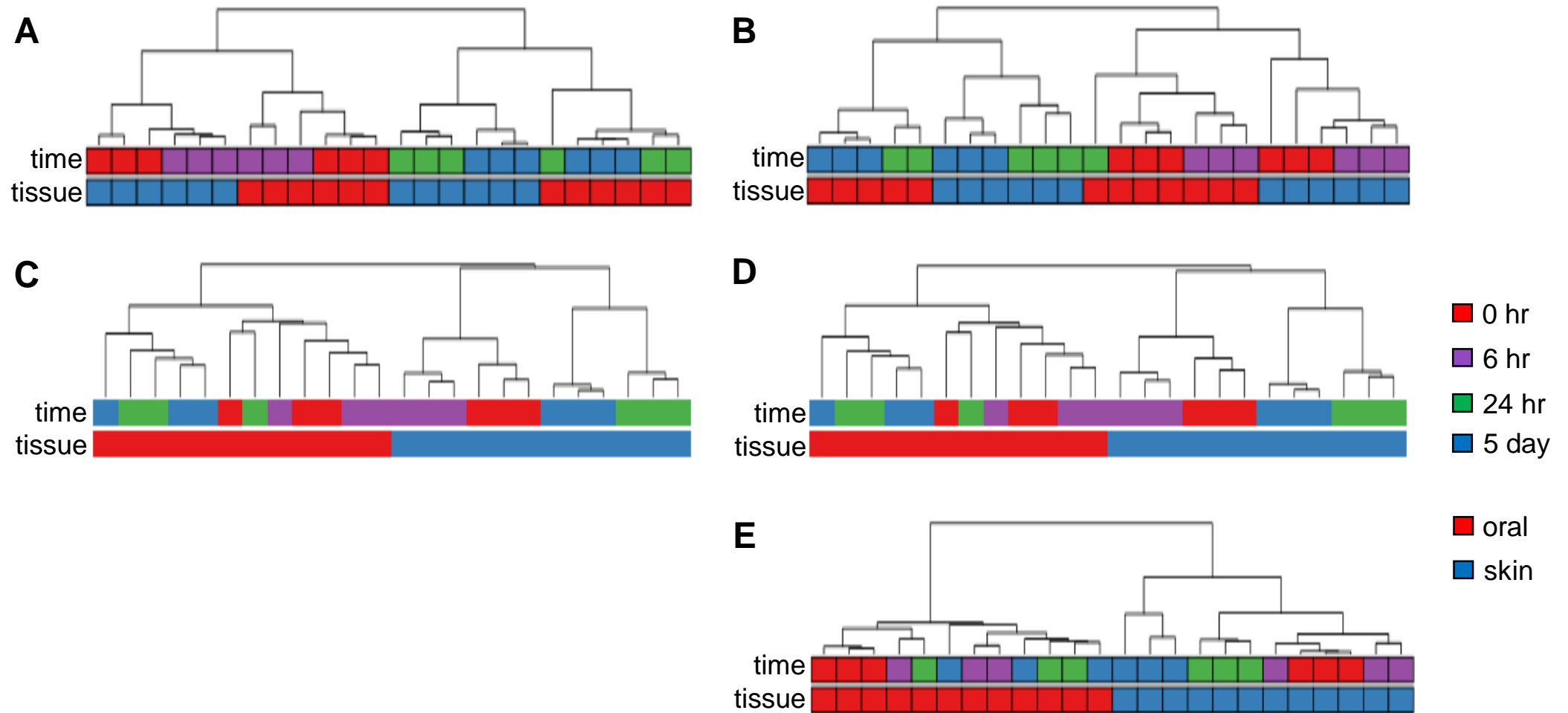
L.A. DiPietro, University of Illinois at Chicago, College of Dentistry, 801 S. Paulina Street, Chicago, IL 60612, USA. Email: ldipiet@uic.edu



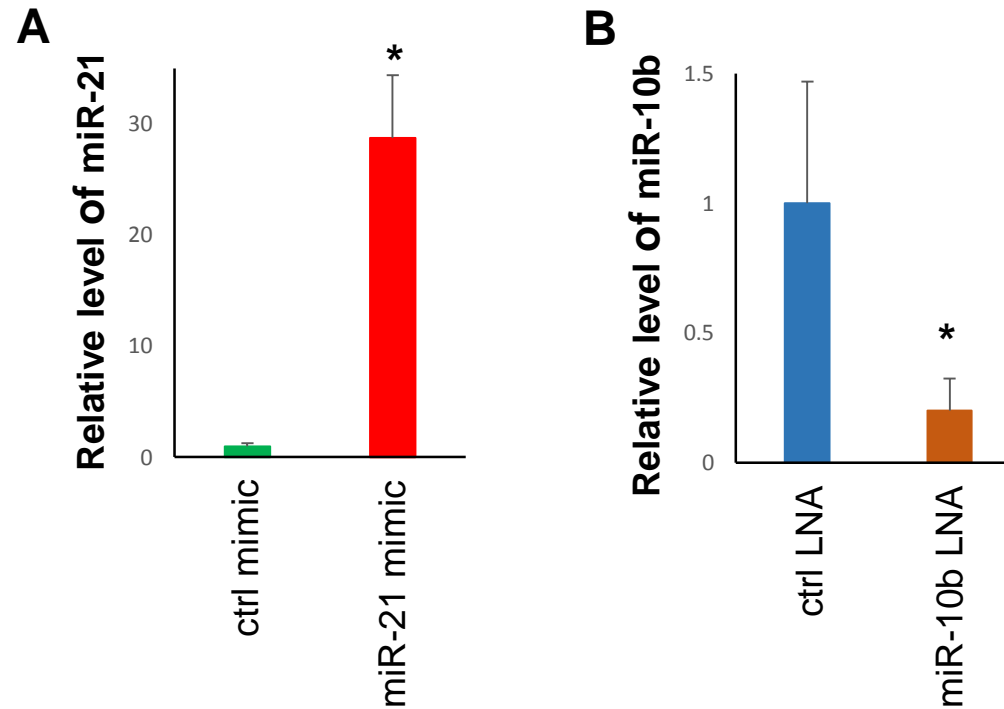
Supplementary Figure S1: Tissue specific microRNA signatures for skin and oral mucosa epithelium. MicroRNA profiling was performed on mouse skin and oral mucosal (palate) epithelium. Tissue specific microRNA signatures (presented as heatmap) for skin and oral mucosa epithelium were established by their differentially expression patterns (53 microRNAs, $p < 0.01$).



Supplementary Figure S2: Testing the classification potential of miRNome by unsupervised learning method to find grouping in samples set. Principal component analysis (PCA) was performed using the complete dataset (n=24), and PC1 and PC2 explain 23.7% and 19.9% of the variance, respectively (**A**). Prediction ellipses with probability of 0.95 were shown for tissue groups (**B**) and time group (**C**), indicate that PC1 can explain the variance associated with tissue specificity and PC2 appears to be associated with the variance related to wound healing time course.



Supplementary Figure S3: Testing the classification potential of microRNA signature sets by unsupervised learning method to find grouping in samples set. Hierarchical clustering analysis was performed on the whole sample set ($n=24$), using (A) 18 concurrently differentially expressed microRNAs associated with both skin and oral wound healing, (B) 33 differentially expressed microRNAs associated with oral wound healing, (C) 200 differentially expressed microRNAs associated with skin wound healing, (D) the combined 215 differentially microRNAs in wound healing, (E) 53 baseline tissue specific differentially expressed microRNAs.



Supplementary Figure S4: Confirmation of the microRNA mimic mediated up-regulation of miR-21 and the LNA inhibitor mediated down-regulation of miR-10b in mouse skin wounds. (A) The miR-21 mimic or negative control mimic were delivered to the mouse skin wounds using an animal origin-free lipid nanoparticle (InvivoFectamine 3.0 Reagent from Invitrogen) at the time of injury. The microRNA mimic mediated up-regulation of miR-21 was confirmed by TaqMan assay-based real time PCR quantification on day 1 wound samples. (B) The LNA inhibitor for miR-10b or negative control LNA were delivered to the mouse skin wounds using an animal origin-free lipid nanoparticle (InvivoFectamine 3.0 Reagent from Invitrogen) at the time of injury. The LNA inhibitor mediated down-regulation of miR-10b was confirmed by TaqMan assay-based real time PCR quantification on wound tissue samples harvested at day 1 post-wounding (* $p < 0.05$).

Supplementary Table S1: Top 10 most abundant microRNAs in skin and oral mucosa during wound healing

| wound healing time course | Skin | | oral mucosa | |
|-------------------------------------|-----------|--------------|-------------|--------------|
| | miR name | % of miRNome | miR name | % of miRNome |
| 0 hour (unwounded, baseline) | miR-10b | 0.13453 | miR-27b | 0.096029 |
| | miR-10a | 0.076385 | miR-26a | 0.063469 |
| | miR-26a | 0.065607 | miR-99a | 0.059831 |
| | miR-27b | 0.060006 | miR-143 | 0.04909 |
| | miR-99a | 0.040932 | let-7c | 0.045329 |
| | miR-143 | 0.031033 | miR-125b | 0.045091 |
| | miR-125b | 0.030901 | let-7f | 0.034871 |
| | let-7c | 0.030461 | miR-199a | 0.032343 |
| | let-7f | 0.029307 | miR-205 | 0.029648 |
| | miR-1a | 0.026512 | miR-203 | 0.029631 |
| | miR-21 | 0.010946 * | miR-21 | 0.013492 * |
| | miR-203 | 0.019338 * | miR-10b | 0.028247 * |
| | | | miR-10a | 0.000472 * |
| 6 hours post wounding | miR-10b | 0.116332 | miR-27b | 0.125659 |
| | miR-1a | 0.073676 | miR-99a | 0.066628 |
| | miR-10a | 0.065049 | miR-26a | 0.059918 |
| | miR-27b | 0.060364 | miR-143 | 0.057865 |
| | miR-99a | 0.058471 | let-7f | 0.039192 |
| | miR-26a | 0.052577 | let-7c | 0.037748 |
| | miR-143 | 0.039734 | miR-125b | 0.034433 |
| | let-7f | 0.037163 | miR-203 | 0.033448 |
| | miR-133a | 0.027194 | miR-199a | 0.031841 |
| | miR-99b | 0.022871 | miR-21 | 0.024844 |
| | miR-21 | 0.020463 * | | |
| 24 hours post wounding | miR-21 | 0.064331 | miR-27b | 0.110127 |
| | miR-10b | 0.052373 | miR-99a | 0.053833 |
| | miR-27b | 0.050933 | miR-26a | 0.053736 |
| | miR-10a | 0.049371 | miR-21 | 0.046823 |
| | miR-99a | 0.046014 | let-7c | 0.044605 |
| | let-7f | 0.04268 | miR-143 | 0.042485 |
| | miR-26a | 0.040699 | let-7f | 0.036187 |
| | miR-146b | 0.039564 | miR-199a | 0.028033 |
| | miR-143 | 0.03701 | miR-203 | 0.027665 |
| | let-7c-5p | 0.03682 | miR-205 | 0.027606 |
| 5 days post wounding | miR-21 | 0.129953 | miR-27b | 0.115615 |
| | miR-27b | 0.060603 | let-7c | 0.051672 |
| | miR-10b | 0.037804 | miR-143 | 0.051497 |

| | | | |
|----------|----------|----------|----------|
| let-7f | 0.036286 | miR-99a | 0.051173 |
| miR-26a | 0.036118 | miR-26a | 0.047261 |
| miR-143 | 0.033552 | miR-21 | 0.040623 |
| miR-199a | 0.033522 | let-7f | 0.038901 |
| let-7c | 0.032773 | miR-199a | 0.031018 |
| miR-99a | 0.030027 | miR-203 | 0.030965 |
| miR-146b | 0.030023 | miR-125b | 0.028131 |

note:

*: While not in top 10, these selected miRs were also presented for comparancing between tissues.

Supplementary Table S2: Baseline tissue-specific differentially expressed microRNAs between skin and oral mucosa epithelium

| miR name | p-value | adj P | Skin | | Oral | | miR_seq |
|-------------|----------|---------|---------|--------|--------|--------|-------------------------------|
| | | | Mean | StDev | Mean | StDev | |
| miR-378a-3p | 1.29E-03 | 0.04304 | 15,167 | 183 | 6,013 | 400 | ACTGGACTTGGAGTCAGAAGGC |
| miR-31-5p | 1.85E-03 | 0.0523 | 437 | 140 | 9,980 | 739 | AGGCAAGATGCTGGCATAGCT |
| miR-10a-5p | 2.19E-03 | 0.05383 | 294,829 | 38,847 | 1,421 | 665 | TACCCTGTAGATCCGAATTTGT |
| miR-10b-5p | 2.52E-03 | 0.05931 | 519,259 | 82,583 | 85,095 | 24,872 | TACCCTGTAGAACCGAATTTGT |
| miR-133a-3p | 4.19E-03 | 0.0818 | 55,766 | 31,546 | 3,956 | 1,681 | TTTGGTCCCTTCAACCAGCTGT |
| miR-146b-5p | 4.92E-03 | 0.08283 | 66,712 | 6,568 | 10,796 | 3,023 | TGAGAACTGAATTCATAGGCTGT |
| miR-126a-5p | 6.54E-03 | 0.096 | 3,437 | 491 | 6,408 | 985 | CATTATTACTTTTGGTACGCG |
| miR-34c-5p | 7.34E-03 | 0.09894 | 122 | 43 | 10,229 | 8,453 | AGGCAGTGTAGTTAGCTGATTGC |
| miR-30a-5p | 8.14E-03 | 0.09918 | 47,463 | 4,893 | 29,008 | 1,047 | TGTA AACATCCTCGACTGGAAGCT |
| miR-96-5p | 8.19E-03 | 0.09918 | 11,975 | 1,738 | 6,919 | 917 | TTTGGCACTAGCACATTTTGGCT |
| miR-1a-3p | 8.30E-03 | 0.09918 | 102,330 | 27,364 | 9,517 | 5,590 | TGGAATGTAAGAAGTATGTAT |
| miR-451a | 9.75E-03 | 0.10566 | 823 | 249 | 16,627 | 11,565 | AAACCGTTACCATTACTGAGT |
| miR-470-5p | 2.90E-05 | 0.00801 | 0 | 0 | 344 | 40 | TTCTTGACTGGCACTGGTGAGT |
| miR-465b-3p | 4.23E-05 | 0.00801 | 0 | 0 | 21 | 2 | GATCAGGGCCTTTCTAAGTAGA |
| miR-465c-5p | 4.24E-05 | 0.00801 | 0 | 0 | 73 | 9 | TATTTAGAATGGCGCTGATCTG |
| miR-10a-3p | 7.10E-05 | 0.01005 | 51 | 8 | 0 | 0 | CAAATTCGTATCTAGGGGAAT |
| miR-881-3p | 1.35E-04 | 0.01134 | 0 | 0 | 54 | 11 | AACTGTGTCTTTTCTGAATAGA |
| miR-465a-5p | 1.47E-04 | 0.01134 | 0 | 0 | 106 | 27 | TATTTAGAATGGCACTGATGTGA |
| miR-107-3p | 1.58E-04 | 0.01134 | 842 | 50 | 442 | 23 | AGCAGCATTGTACAGGGCTATC |
| miR-1247-3p | 1.60E-04 | 0.01134 | 0 | 0 | 24 | 6 | CGGGAACGTCGAGACTGGAGC |
| miR-880-3p | 2.50E-04 | 0.01574 | 0 | 0 | 55 | 15 | TACTCCATCCTCTCTGAGTAGA |
| miR-211-5p | 3.99E-04 | 0.01965 | 423 | 87 | 42 | 10 | TTCCCTTTGTCTATCCTTTGCCT |
| miR-1247-5p | 4.36E-04 | 0.01965 | 12 | 5 | 601 | 286 | ACCCGTCCCGTTCGTCCCGGA |
| miR-471-5p | 4.46E-04 | 0.01965 | 0 | 0 | 22 | 9 | TACGTAGTATAGTGCTTTTAC |
| miR-351-5p | 4.51E-04 | 0.01965 | 1,991 | 168 | 4,097 | 329 | TCCCTGAGGAGCCCTTTGAGCCT |
| miR-132-3p | 8.69E-04 | 0.0335 | 34 | 1 | 122 | 13 | TAACAGTCTACAGCCATGGTCG |
| miR-214-3p | 8.88E-04 | 0.0335 | 2,337 | 229 | 4,735 | 453 | ACAGCAGGCACAGACAGGCAGT |
| miR-1983 | 1.20E-03 | 0.04229 | 30 | 6 | 111 | 17 | CTCACCTGGAGCATGTTTTCT |
| miR-34c | 1.79E-03 | 0.0523 | 0 | 0 | 141 | 116 | AGGCAGTGTAGTTAGCTGATTGT |
| miR-338-3p | 1.84E-03 | 0.0523 | 470 | 59 | 1,124 | 77 | TCCAGCATCAGTGATTTTGT |
| miR-872-3p | 2.02E-03 | 0.05383 | 339 | 31 | 576 | 41 | TGA ACTATTGCAGTAGCCTCCT |
| miR-378b_R | 2.10E-03 | 0.05383 | 3,066 | 241 | 1,296 | 186 | ACTGGACTTGGAGTCAGAAGGCT |
| miR-150-5p | 2.68E-03 | 0.06073 | 1,669 | 199 | 3,217 | 367 | TCTCCCAACCCTTGACCAGT |
| miR-193b-3p | 3.54E-03 | 0.07707 | 3,812 | 315 | 2,245 | 249 | AACTGGCCCACAAAGTCCCGCT |
| miR-1a-1-5p | 3.97E-03 | 0.0818 | 47 | 26 | 3 | 2 | ACATACTCTTTATATGCCATA |
| miR-467b-5p | 4.21E-03 | 0.0818 | 5 | 3 | 86 | 50 | TAAGTGCCTGCATGTATATGC |
| miR-218-5p | 4.34E-03 | 0.0818 | 128 | 24 | 294 | 51 | TTGTGCTTGATCTAACCATGT |
| miR-375-3p | 4.67E-03 | 0.08283 | 277 | 43 | 1,377 | 450 | TTTGTTCGTTGCGCTCGCGTGA |
| miR-133a-5p | 4.81E-03 | 0.08283 | 272 | 3 | 25 | 7 | AGCTGGTAAAATGGAACCAAAT |
| miR-676-5p | 4.98E-03 | 0.08283 | 76 | 10 | 38 | 2 | ACTCTACAACCTTAGGACTTGC |
| miR-672-5p | 5.18E-03 | 0.0838 | 17 | 5 | 79 | 26 | TGAGGTTGGTGTACTGTGTGTGA |
| miR-511-5p | 5.43E-03 | 0.08531 | 19 | 3 | 4 | 1 | CATGCCTTTTGTCTGCACTCA |
| miR-128-3p | 6.27E-03 | 0.09588 | 954 | 60 | 398 | 69 | TCACAGTGAACCGGTCTCTTT |
| miR-196a-5p | 6.61E-03 | 0.096 | 186 | 216 | 0 | 0 | TAGGTAGTTTCATGTTGTTGG |
| miR-223-3p | 6.86E-03 | 0.09705 | 706 | 134 | 289 | 24 | TGTCAGTTTGTCAAATACCCCAT |
| miR-184-3p | 7.25E-03 | 0.09894 | 41 | 5 | 22 | 3 | TGGACGGAGA ACTGATAAGGGT |
| miR-378d | 7.63E-03 | 0.09918 | 1,332 | 134 | 368 | 96 | ACTGGACTTGGAGTCAGAAGGT |
| miR-23a-5p | 7.94E-03 | 0.09918 | 5 | 2 | 16 | 4 | GGGGTTCTGGGGATGGGATTT |
| miR-223-5p | 8.56E-03 | 0.09918 | 105 | 15 | 19 | 6 | CGTGTATTTGACAAGCTGAGTTGGACACT |
| miR-501-3p | 8.59E-03 | 0.09918 | 3,835 | 392 | 1,609 | 327 | AATGCACCCGGGCAAGGATTTGG |
| miR-669a-5p | 8.81E-03 | 0.09972 | 5 | 2 | 28 | 3 | AGTTGTGTGTGCATGTTTATGTCT |

| | | | | | | | |
|-------------|-----------------|---------|-----|----|-----|----|-------------------------|
| miR-874-3p | 9.87E-03 | 0.10566 | 146 | 30 | 308 | 48 | CTGCCCTGGCCCGAGGGACCGAC |
| miR-1198-5p | 9.89E-03 | 0.10566 | 162 | 14 | 224 | 19 | TATGTGTTCTGGCTGGCTTGG |

notes:

miR name: differentially expressed miRs that have the reads greater than the average (5458) of the dataset.

adj P: Benjamini-Hochberg adjusted P value.

Supplementary Table S3: Differentially expressed microRNAs in oral mucosal wound healing

| miRNA | p-value | adj P | 0hr | | | 6hr | | | 24h | | | 5dy | | | miR_seq |
|-----------------|-----------|-----------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------------------|------|-------|-------|---------|
| | | | Fold | Chang | StDev | Fold | Chang | StDev | Fold | Chang | StDev | Fold | Chang | StDev | |
| rno-miR-378a-3p | 0.0008184 | 0.0867151 | 1 | 0.0664713 | 0.7328313 | 0.0347267 | 0.9548818 | 0.05151 | 1.0301608 | 0.09042 | ACTGGACTTGGAGTCAGAAGGC | | | | |
| mmu-miR-148b-3p | 0.0035625 | 0.1320058 | 1 | 0.0999046 | 1.3048705 | 0.4011814 | 2.4221855 | 0.9691142 | 3.2551242 | 0.6331512 | TCAGTGCATCACAGAACCTTTGT | | | | |
| mmu-miR-181a-5p | 0.0044725 | 0.1320058 | 1 | 0.1137351 | 0.8214249 | 0.0947066 | 0.6598383 | 0.0646125 | 0.7023587 | 0.0548996 | AACATTCAACGCTGTGCGGTGAGT | | | | |
| mmu-miR-31-5p | 0.0066523 | 0.1516625 | 1 | 0.0740672 | 0.8015539 | 0.2209285 | 0.9452544 | 0.0772447 | 1.4866995 | 0.1154021 | AGGCAAGATGCTGGCATAGCT | | | | |
| mmu-miR-23b-3p | 0.0071932 | 0.1516625 | 1 | 0.111629 | 0.7357408 | 0.0466384 | 1.0309673 | 0.1224344 | 0.9944933 | 0.0684041 | ATCACATTGCCAGGATTACC | | | | |
| mmu-miR-200c-3p | 0.0092364 | 0.1632779 | 1 | 0.1557818 | 0.8651189 | 0.2146033 | 1.7654788 | 0.5850174 | 1.8783663 | 0.1905794 | TAATACTGCCGGTAAATGATGGA | | | | |
| mmu-miR-195a-5p | 0.0097908 | 0.1632779 | 1 | 0.1120782 | 0.9076189 | 0.0649711 | 0.8820817 | 0.1469965 | 0.6635547 | 0.0478765 | TAGCAGCACAGAAATATTGGC | | | | |
| mmu-miR-3068-5p | 0.0002268 | 0.0752639 | 1 | 0.257308 | 1.0663981 | 0.3900415 | 3.5321486 | 0.8150827 | 3.6866457 | 0.1352283 | TTGGAGTTCATGCAAGTTCTAAC | | | | |
| mmu-miR-101c | 0.0002632 | 0.0752639 | 1 | 0.1031532 | 3.6350439 | 0.4766979 | 1.6863383 | 0.5710504 | 1.4593673 | 0.2365202 | TACAGTACTGTGATAACTGAT | | | | |
| mmu-miR-30a-3p | 0.0006925 | 0.0867151 | 1 | 0.0882855 | 1.0545809 | 0.0647274 | 0.7847491 | 0.0160182 | 0.8296518 | 0.0335745 | CTTTCAGTCGGATGTTTGCAGC | | | | |
| mmu-miR-17-5p | 0.0007147 | 0.0867151 | 1 | 0.1584791 | 0.8475679 | 0.0483152 | 1.5117758 | 0.1628031 | 0.9948067 | 0.0465453 | CAAAGTGCTTACAGTGCAGGTAG | | | | |
| mmu-miR-219a-5p | 0.0009096 | 0.0867151 | 1 | 0.2515456 | 0.8655548 | 0.1150959 | 1.9265423 | 0.2487612 | 0.9787669 | 0.078554 | TGATTGTCCAACGCAATTCTCG | | | | |
| oan-miR-27b-3p | 0.0013897 | 0.1075841 | 1 | 0.0529891 | 1.0604624 | 0.0815091 | 1.2212844 | 0.1148333 | 1.4813389 | 0.1309122 | TTCACAGTGGCTAAGTTCTGCGT | | | | |
| mmu-miR-676-5p | 0.001521 | 0.1075841 | 1 | 0.0587988 | 1.2536092 | 0.1310737 | 1.5343393 | 0.1647377 | 1.5822301 | 0.1767254 | ACTCTACAACCTTAGGACTTGC | | | | |
| mmu-miR-187-5p | 0.0020207 | 0.1075841 | 1 | 0.1332469 | 0.9633736 | 0.1775188 | 1.0897682 | 0.1082475 | 1.7067577 | 0.0787297 | AGGCTACAACACAGGACCCGGGA | | | | |
| mmu-miR-136-5p | 0.0020635 | 0.1075841 | 1 | 0.1548394 | 1.4044623 | 0.1419101 | 0.872338 | 0.052316 | 0.8988278 | 0.0852673 | AGGACTCCATTTGTTTTGATGAT | | | | |
| mmu-miR-362-5p | 0.0020689 | 0.1075841 | 1 | 0.3961423 | 0.8407961 | 0.4010792 | 3.2770347 | 1.3747622 | 4.2970719 | 0.8784176 | AATCCTTGGAACCTAGGTGTGAAT | | | | |
| mmu-miR-434-3p | 0.0023305 | 0.1110887 | 1 | 0.0890199 | 1.317616 | 0.0777199 | 0.7998577 | 0.1350153 | 0.9871484 | 0.0587686 | TTTGAACCATCACTCGACTCCT | | | | |
| mmu-miR-20a-5p | 0.002801 | 0.1232459 | 1 | 0.1382523 | 1.1142864 | 0.0608071 | 1.716838 | 0.3460544 | 1.4510558 | 0.0167519 | TAAAGTGCTTATAGTGCAGGTAG | | | | |
| mmu-miR-425-3p | 0.0035515 | 0.1320058 | 1 | 0.1509714 | 0.7956976 | 0.3416713 | 1.5800723 | 0.008423 | 1.9031004 | 0.134065 | CATCGGGAATGTCGTGTCCGCC | | | | |
| mmu-miR-340-5p | 0.0037138 | 0.1320058 | 1 | 0.0858626 | 2.052563 | 0.4916944 | 1.2777403 | 0.2398432 | 1.1007619 | 0.1596562 | TTATAAAGCAATGAGACTGATT | | | | |
| mmu-miR-664-3p | 0.0040783 | 0.1320058 | 1 | 0.0763262 | 0.9307747 | 0.0316889 | 0.7738323 | 0.146559 | 0.6382082 | 0.0549795 | TATTCATTTACTCCCCAGCCT | | | | |
| mdo-miR-181a-5p | 0.0045652 | 0.1320058 | 1 | 0.4062099 | 0.4520095 | 0.1849618 | 1.5972577 | 0.5706788 | 1.6012956 | 0.1129886 | AACATTCAACGCTGTGCGGTGAGTTTT | | | | |
| mmu-miR-700-5p | 0.0046156 | 0.1320058 | 1 | 0.0989355 | 0.8064185 | 0.0942522 | 0.6528607 | 0.0928495 | 0.678155 | 0.0392187 | TAAGGCTCCTCCTGTGCTTGC | | | | |
| mmu-miR-7a-5p | 0.0049464 | 0.13473 | 1 | 0.1152172 | 1.4026239 | 0.3423426 | 2.0379229 | 0.3815397 | 1.533827 | 0.1159376 | TGGAAGACTAGTGATTTTGTGTT | | | | |
| mmu-miR-193b-3p | 0.0056089 | 0.1423618 | 1 | 0.1111418 | 0.5820916 | 0.0633109 | 0.6239657 | 0.1001622 | 0.5880681 | 0.1051606 | AACTGGCCACAAAGTCCCGCT | | | | |
| mmu-miR-141-5p | 0.0057243 | 0.1423618 | 1 | 0.1374447 | 1.2939718 | 0.0981627 | 1.4636957 | 0.4518719 | 0.703996 | 0.0905252 | CATCTCCAGTGCAGTGTGGA | | | | |
| chi-let-7b-5p | 0.0060559 | 0.1443321 | 1 | 0.2975176 | 0.5674505 | 0.268898 | 0.7429631 | 0.2223544 | 0.2416335 | 0.0560828 | CGTGGTGAGGTAGTAGTTGTGTGTT | | | | |
| mmu-miR-369-3p | 0.0072728 | 0.1516625 | 1 | 0.3373636 | 1.8783307 | 0.4679148 | 0.8015508 | 0.0371642 | 1.3602938 | 0.1336945 | AATAATACATGGTTGATCTTT | | | | |
| mmu-miR-223-3p | 0.007424 | 0.1516625 | 1 | 0.0825289 | 2.6603169 | 0.8650528 | 3.7225306 | 2.4601821 | 1.0758219 | 0.174759 | TGTCAGTTTGTCAAATACCCCAT | | | | |
| cgr-miR-2424 | 0.0086861 | 0.1632779 | 1 | 0.2404127 | 1.3771909 | 0.1189381 | 1.0305804 | 0.0909723 | 0.7900936 | 0.0090443 | ACAGATCTTTGGTAATCTGATGGCT | | | | |
| mmu-miR-185-5p | 0.0089071 | 0.1632779 | 1 | 0.1768065 | 0.8605288 | 0.093547 | 1.1757479 | 0.1890558 | 1.4661178 | 0.1582404 | TGGAGAGAAAGGCAGTTCTCTGA | | | | |
| mmu-miR-1981-5p | 0.0089076 | 0.1632779 | 1 | 0.1363764 | 0.7991036 | 0.0798437 | 1.5570912 | 0.6208528 | 2.1169091 | 0.5442181 | GTAAAGGCTGGGCTTAGACGTGG | | | | |

notes:

adj P: Benjamini-Hochberg adjusted P value.

Supplementary Table S4: Differentially expressed microRNAs in skin wound healing

| miRNA | p-value | BH adj p-value | 0hr | | | 6hr | | | 24h | | | 5dy | | | miR_seq |
|-----------------|----------|----------------|------------|-----------|-----------|------------|-----------|-----------|------------|-----------|-------------------------------|------------|-------|--|---------|
| | | | Fold Chang | StDev | | Fold Chang | StDev | | Fold Chang | StDev | | Fold Chang | StDev | | |
| mmu-miR-362-5p | 4.65E-08 | 1.37615E-05 | 1 | 0.0837141 | 0.6413249 | 0.0891709 | 4.2812828 | 0.4271781 | 5.5743529 | 0.866634 | AATCCTTGGAACTAGGTGTGAAT | | | | |
| mmu-miR-378b | 9.38E-07 | 0.000117099 | 1 | 0.5078893 | 101.84181 | 42.218462 | 68.367811 | 9.9917889 | 56.644035 | 8.8869892 | CCTGGACTTGGAGTCAGAAGGC | | | | |
| mmu-miR-30a-5p | 9.89E-07 | 0.000117099 | 1 | 0.1030876 | 1.2514485 | 0.111781 | 0.582879 | 0.0226006 | 0.453159 | 0.0342868 | TGTAACATCCTCGACTGGAAGCT | | | | |
| mmu-miR-21a-5p | 1.90E-06 | 0.000187873 | 1 | 0.2539178 | 1.9940871 | 0.2800941 | 4.5685168 | 0.3442066 | 8.7049501 | 1.4660301 | TAGCTTATCAGACTGATGTTGA | | | | |
| mo-miR-140-3p | 2.82E-06 | 0.000238909 | 1 | 0.0324798 | 0.8162478 | 0.1297814 | 2.9362838 | 0.404611 | 1.6118772 | 0.037681 | ACCACAGGGTAGAACACGGACT | | | | |
| mmu-miR-132-3p | 4.93E-06 | 0.000340665 | 1 | 0.0352686 | 1.5800502 | 0.2569972 | 3.4745052 | 0.9094494 | 7.8466167 | 1.5319354 | TAACAGTCTACAGCCATGGTCG | | | | |
| mmu-miR-142a-5p | 5.18E-06 | 0.000340665 | 1 | 0.0255513 | 1.2848074 | 0.2651946 | 4.1437431 | 0.4405762 | 2.3621902 | 0.3453455 | CCCATAAAGTAGAAAGCACTAC | | | | |
| mmu-miR-574-5p | 6.15E-06 | 0.000363805 | 1 | 0.1303411 | 1.0603561 | 0.0365244 | 1.7632596 | 0.1948124 | 2.3909489 | 0.1317313 | TGAGTGTGTGTGTGTGAGTGT | | | | |
| mmu-miR-363-3p | 8.53E-06 | 0.000459292 | 1 | 0.0952857 | 0.6652307 | 0.0891167 | 2.0053947 | 0.4497003 | 2.7139678 | 0.2054663 | AATTGCACGGTATCCATCTGTAT | | | | |
| mmu-miR-148b-3p | 1.21E-05 | 0.000596292 | 1 | 0.1225519 | 1.4401436 | 0.1791595 | 3.6437393 | 0.7899089 | 2.8325129 | 0.2177709 | TCAGTGCATCACAGAACTTTGT | | | | |
| mmu-miR-370-3p | 1.40E-05 | 0.000638568 | 1 | 0.0605291 | 1.3253023 | 0.1824486 | 1.0811611 | 0.4500462 | 7.6443345 | 1.0795915 | GCCTGCTGGGGTGGAACTGGT | | | | |
| mmu-miR-503-5p | 1.76E-05 | 0.00074296 | 1 | 0.0705028 | 2.5582538 | 1.259011 | 13.009299 | 3.9726796 | 24.044095 | 4.5673285 | TAGCAGCGGGAACAGTACTGCAG | | | | |
| mmu-miR-130b-5p | 1.89E-05 | 0.000747309 | 1 | 0.3830448 | 0.7955666 | 0.0347566 | 4.3723402 | 0.7893309 | 2.7859502 | 0.2058123 | ACTCTTCCCTGTTGCACTACT | | | | |
| mmu-miR-223-5p | 2.13E-05 | 0.000786602 | 1 | 0.1439168 | 1.0131108 | 0.2574665 | 4.9520961 | 0.3066759 | 1.9972864 | 0.5349822 | CGTGTATTTGACAAGCTGAGTTGGACACT | | | | |
| mmu-miR-193b-3p | 2.63E-05 | 0.000843812 | 1 | 0.0826412 | 0.7382197 | 0.0453673 | 0.528423 | 0.1066424 | 0.2426527 | 0.0544516 | AACTGGCCACAAAAGTCCCGCT | | | | |
| mmu-miR-133a-5p | 2.68E-05 | 0.000843812 | 1 | 0.0124961 | 1.6103408 | 0.6638912 | 0.6235684 | 0.0782252 | 0.2382276 | 0.0268378 | AGCTGTAAATGGAACCAAAT | | | | |
| mmu-miR-409-3p | 2.82E-05 | 0.000843812 | 1 | 0.1951633 | 1.643613 | 0.2753653 | 1.6411885 | 0.5257005 | 7.3129923 | 1.1643407 | GAATGTTGCTCGGTGAACCCCT | | | | |
| mmu-miR-30e-3p | 2.85E-05 | 0.000843812 | 1 | 0.1336761 | 1.0853182 | 0.0504217 | 0.7121563 | 0.0388258 | 0.4821073 | 0.0605488 | CTTTCAGTCGGATGTTTACAGC | | | | |
| mmu-miR-540-3p | 3.20E-05 | 0.000902329 | 1 | 0.303299 | 1.4690526 | 0.4930735 | 1.3405418 | 0.3674875 | 8.9795826 | 1.373148 | AGGTCAGAGGTCGATCCTGGGC | | | | |
| mmu-miR-106b-3p | 3.48E-05 | 0.00093549 | 1 | 0.1005209 | 1.0092353 | 0.1131692 | 3.1954698 | 0.7250982 | 2.2884583 | 0.2963492 | CCGCACTGTGGTACTTGTCT | | | | |
| cgr-miR-139-5p | 3.93E-05 | 0.00101248 | 1 | 0.1717709 | 1.5692417 | 0.2170089 | 6.2644141 | 1.1548753 | 1.8048574 | 0.5971037 | TCTACAGTGCACGTGTCTCCAGT | | | | |
| mmu-miR-3068-5p | 4.23E-05 | 0.001042265 | 1 | 0.1667673 | 0.6336216 | 0.051074 | 2.0222936 | 0.5268974 | 2.5359095 | 0.3824849 | TTGAGTTCATGCAAGTTCTAAC | | | | |
| mmu-miR-1198-5p | 5.01E-05 | 0.001096217 | 1 | 0.0848818 | 1.2767261 | 0.0491863 | 2.4768726 | 0.5033243 | 1.9572109 | 0.151669 | TATGTTTCTCGGCTGGCTTGG | | | | |
| mmu-miR-7a-5p | 5.29E-05 | 0.001096217 | 1 | 0.2993717 | 1.8734799 | 0.1347995 | 5.4050207 | 0.8134072 | 5.6690703 | 1.739785 | TGGAAGACTAGTATTTTGTGTT | | | | |
| mmu-miR-1983 | 5.38E-05 | 0.001096217 | 1 | 0.1999005 | 1.1325902 | 0.4877763 | 3.0117198 | 0.5608882 | 8.178836 | 2.1482012 | CTCACCTGGAGCATGTTTTCT | | | | |
| mmu-miR-31-5p | 5.45E-05 | 0.001096217 | 1 | 0.3202481 | 0.6691327 | 0.4225293 | 0.8408116 | 0.3884696 | 11.688945 | 1.7979082 | AGGCAAGATGCTGGCAGTACT | | | | |
| mmu-miR-195a-5p | 5.56E-05 | 0.001096217 | 1 | 0.1482205 | 1.0863882 | 0.1409315 | 0.6123434 | 0.0445061 | 0.4327755 | 0.0546023 | TAGCAGCACAGAAATATTGGC | | | | |
| mmu-miR-485-3p | 5.93E-05 | 0.001133174 | 1 | 0.2459614 | 1.9433503 | 0.0360904 | 1.2241166 | 0.5878268 | 6.8873522 | 0.8276695 | GTCATACACGGCTCTCCTCTCT | | | | |
| mmu-miR-223-3p | 7.01E-05 | 0.001296402 | 1 | 0.1896275 | 3.4725465 | 1.0452788 | 21.881903 | 7.0927223 | 5.3417263 | 2.7982239 | TGTCAGTTTGTCAAATACCCCAT | | | | |
| mmu-miR-667-3p | 7.46E-05 | 0.001337691 | 1 | 0.1521384 | 0.8861784 | 0.191653 | 0.6646901 | 0.241756 | 3.5485176 | 0.349971 | TGACACCTGCCACCCAGCCCAAG | | | | |
| mmu-miR-425-3p | 8.08E-05 | 0.001402056 | 1 | 0.2348775 | 0.6035792 | 0.1815773 | 2.1053006 | 0.0998882 | 2.2176167 | 0.2181035 | CATCGGAATGTCGTGTCGCC | | | | |
| mmu-miR-335-3p | 8.29E-05 | 0.001402056 | 1 | 0.3701342 | 1.8152725 | 0.652019 | 0.9940331 | 0.1049006 | 6.5290917 | 1.3450705 | TTTTTCATTATTGCTCCTGACC | | | | |
| mmu-miR-433-3p | 8.93E-05 | 0.00146842 | 1 | 0.2100516 | 1.708403 | 0.338726 | 1.6380816 | 0.5173994 | 5.8043222 | 0.7944497 | ATCATGATGGGCTCCTCGGTGT | | | | |
| mmu-miR-30a-3p | 1.03E-04 | 0.001644349 | 1 | 0.183004 | 1.2628488 | 0.156489 | 0.6681405 | 0.1129742 | 0.3797533 | 0.064559 | CTTTCAGTCGGATGTTTGCAGC | | | | |
| mmu-miR-34c-5p | 1.23E-04 | 0.00191319 | 1 | 0.3544813 | 1.8903948 | 0.3133666 | 3.4416824 | 0.5934597 | 35.217775 | 29.988102 | AGGCAGTGTAGTTAGCTGATTGC | | | | |
| mmu-miR-298-5p | 1.35E-04 | 0.001986375 | 1 | 0.1104028 | 1.5461294 | 0.6010547 | 2.0791757 | 0.5955064 | 8.4553965 | 1.8720677 | GGCAGAGGAGGGCTGTTCTTCCC | | | | |
| mmu-miR-379-3p | 1.38E-04 | 0.001986375 | 1 | 0.2696918 | 1.3416434 | 0.3230751 | 0.8762274 | 0.213002 | 4.2139488 | 0.7683176 | TATGTAACATGGTCCACTAAC | | | | |
| mmu-let-7g-5p | 1.44E-04 | 0.002025249 | 1 | 0.0380169 | 1.3297929 | 0.0565121 | 1.8645238 | 0.2929749 | 1.1722114 | 0.0564105 | TGAGGTAGTAGTTTGTACAGTT | | | | |
| mmu-miR-3535 | 1.57E-04 | 0.002155566 | 1 | 0.2646319 | 1.1974208 | 0.3209042 | 0.4218387 | 0.082361 | 0.2401472 | 0.0560957 | TGGATATGATGACTGATTACCTGAGA | | | | |

| | | | | | | | | | | | |
|------------------|----------|-------------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------|
| mmu-miR-96-5p | 1.60E-04 | 0.002158314 | 1 | 0.1451501 | 1.059792 | 0.3840414 | 0.3436007 | 0.0457457 | 0.2286068 | 0.049049 | TTTGGCACTAGCACATTTTTTGTCT |
| hsa-miR-411-3p | 1.81E-04 | 0.002375894 | 1 | 0.3764971 | 1.3391691 | 0.4468603 | 0.8979431 | 0.2188992 | 6.635335 | 1.6070453 | TATGTAACACGGTCCACTAAC |
| mmu-miR-134-5p | 1.93E-04 | 0.002477828 | 1 | 0.5045897 | 1.8306631 | 0.2552175 | 1.6669484 | 0.4641584 | 7.7421117 | 0.9986563 | TGTGACTGGTTGACCAGAGGGG |
| mmu-miR-503-3p | 1.97E-04 | 0.002477828 | 1 | 0.1669201 | 1.3625549 | 0.1656011 | 1.3606887 | 0.1713954 | 2.8326096 | 0.5163766 | GAGTATTGTTCCACTGCCTGG |
| mmu-miR-351-3p | 2.21E-04 | 0.002697113 | 1 | 0.5160102 | 3.1651568 | 0.5740431 | 4.2904132 | 0.3168941 | 12.748582 | 3.9546619 | GGTCAAGAGGGCCCTGGGAAC |
| mmu-miR-30d-5p | 2.31E-04 | 0.002697113 | 1 | 0.0801116 | 1.0830755 | 0.0613761 | 0.9045143 | 0.0719118 | 0.6733213 | 0.04992 | TGTAACATCCCCGACTGGAAGCT |
| mmu-miR-467b-5p | 2.32E-04 | 0.002697113 | 1 | 0.5601718 | 2.8944241 | 0.3901845 | 8.115511 | 3.272596 | 5.5245781 | 0.405032 | TAAGTCCTGCATGTATATGC |
| mmu-miR-1a-3p | 2.35E-04 | 0.002697113 | 1 | 0.2674081 | 2.9644116 | 1.6124386 | 0.7510039 | 0.0723657 | 0.3253727 | 0.0818349 | TGGAATGTAAGAAGTATGTAT |
| mmu-miR-323-3p | 2.39E-04 | 0.002697113 | 1 | 0.5585449 | 4.129499 | 0.7608464 | 3.4139647 | 1.6093895 | 15.024682 | 4.2041709 | CACATTACACGGTCGACCTCT |
| mmu-miR-361-3p | 2.41E-04 | 0.002697113 | 1 | 0.0792432 | 0.688706 | 0.0080252 | 1.0993344 | 0.162064 | 1.2191758 | 0.0198303 | CCCCCAGGTGTGATTCTGATTTGT |
| mmu-miR-541-5p | 2.59E-04 | 0.002844113 | 1 | 0.1833458 | 1.3577702 | 0.1383864 | 1.0916668 | 0.415887 | 5.4283139 | 1.4219507 | AAGGGATTCTGATGTTGGTCACACT |
| mmu-miR-26a-5p | 2.85E-04 | 0.003068298 | 1 | 0.2251968 | 0.8548666 | 0.1153536 | 0.4822476 | 0.0365683 | 0.4036757 | 0.0567906 | TTCAGTAAATCCAGGATAGGCT |
| mmu-miR-494-3p | 3.16E-04 | 0.003343007 | 1 | 0.4294394 | 2.1115554 | 0.5560297 | 0.7715996 | 0.3377576 | 8.4825276 | 3.232242 | TGAAACATACACGGGAAACCTCT |
| mmu-miR-376b-3p | 3.30E-04 | 0.003408051 | 1 | 0.3440436 | 1.6609537 | 0.6776486 | 0.7467926 | 0.2669873 | 5.7122662 | 0.8513435 | ATCATAGAGGAACATCCACTT |
| mmu-miR-186-5p | 3.34E-04 | 0.003408051 | 1 | 0.0690767 | 1.1457398 | 0.1549692 | 0.587867 | 0.0332535 | 0.6642662 | 0.106961 | CAAAGAATCTCCTTTTGGGCT |
| mmu-miR-212-5p | 3.59E-04 | 0.003562603 | 1 | 0.3830206 | 2.1547657 | 0.4243423 | 3.2183497 | 0.9333186 | 6.9008617 | 1.8257686 | ACCTTGGCTCTAGACTGCTTACT |
| mmu-miR-15b-3p | 3.61E-04 | 0.003562603 | 1 | 0.0305556 | 0.8181714 | 0.1699805 | 2.3387035 | 0.6628641 | 2.2079041 | 0.2324212 | CGAATCATTATTTGCTGCTCT |
| rno-miR-25-3p | 3.67E-04 | 0.003562603 | 1 | 0.1632616 | 1.0748019 | 0.095391 | 2.2901618 | 0.4756695 | 1.6257507 | 0.0638482 | CATTGCACTGTCTCGGTCTGA |
| mmu-miR-543-3p | 3.80E-04 | 0.003566687 | 1 | 0.7012131 | 2.5617578 | 0.5445745 | 2.1204736 | 0.2965955 | 12.495648 | 2.3040777 | AAACATTGCGGGTGCACCTTCTT |
| mmu-miR-204-5p | 3.86E-04 | 0.003566687 | 1 | 0.1804009 | 1.0925747 | 0.2258802 | 0.8357314 | 0.1992158 | 0.229482 | 0.09897 | TTCCCTTTGTATCCTATGCCT |
| mmu-miR-200a-3p | 4.00E-04 | 0.003642225 | 1 | 0.1610251 | 1.1346017 | 0.0737134 | 1.0736307 | 0.0458806 | 0.4867077 | 0.1251561 | TAACACTGTCTGGTAACGATGT |
| cfa-miR-194 | 4.25E-04 | 0.003812687 | 1 | 0.3220983 | 1.197963 | 0.4374698 | 5.4768064 | 1.0668365 | 3.079215 | 0.826779 | TGTAACAGCAACTCCATGTGGAT |
| mmu-miR-34b-3p | 4.67E-04 | 0.004117098 | 1 | 0.0983948 | 2.4936436 | 0.4709371 | 3.3565731 | 1.2588176 | 31.724868 | 31.777169 | AATCACTAACTCCACTGCCATC |
| mmu-miR-450b-5p | 4.73E-04 | 0.004117098 | 1 | 0.4271449 | 1.822944 | 0.3300301 | 4.0121439 | 1.1600193 | 4.784724 | 1.1127844 | TTTTGCAGTATGTTCTGAATAC |
| mmu-miR-3470a-p3 | 5.06E-04 | 0.004255833 | 1 | 0.3114472 | 5.1495352 | 2.9759897 | 8.2700526 | 1.2078015 | 2.1132654 | 0.5770552 | TGCCTCTGCCTCCTGAGTGC |
| mmu-miR-679-5p | 5.06E-04 | 0.004255833 | 1 | 0.6020162 | 1.2697043 | 0.1811856 | 0.4040892 | 0.1382002 | 3.96496 | 1.2275843 | TTGACTGTGAGGTGACTCTTGGT |
| cgr-miR-139-3p | 5.10E-04 | 0.004255833 | 1 | 0.6151021 | 1.3568197 | 0.1397321 | 7.1855223 | 1.3224754 | 3.8051502 | 1.2796347 | TGGAGACGCGGCCCTGTTGGAGT |
| mmu-miR-125a-3p | 5.21E-04 | 0.004265844 | 1 | 0.2462619 | 1.5251663 | 0.1751887 | 2.4627273 | 0.4619914 | 2.3824232 | 0.061039 | ACAGGTGAGGTTCTTGGGAGC |
| hsa-mir-4450-p3 | 5.26E-04 | 0.004265844 | 1 | 0 | 423.0273 | 730.97273 | 30564.027 | 5904.1359 | 20063.524 | 6812.6168 | CCCCTGGTCCCGTGG |
| mmu-miR-382-5p | 5.34E-04 | 0.004274067 | 1 | 0.2798859 | 1.7164581 | 0.6450547 | 2.1983785 | 0.5719527 | 5.3355518 | 0.9304146 | GAAGTTGTTGCTGGTGGATTCCG |
| mmu-miR-152-5p | 5.42E-04 | 0.004274247 | 1 | 0.0518277 | 0.7466772 | 0.0321612 | 0.7031543 | 0.1416423 | 1.5704891 | 0.2917459 | TAGTTCTGTGATACACTCCGACT |
| mmu-miR-877-5p | 6.10E-04 | 0.004692327 | 1 | 0.3079597 | 1.4961093 | 0.0473247 | 2.0203964 | 0.3501595 | 2.5746913 | 0.1153542 | GTAGAGGAGATGGCGCAGGGGACA |
| mmu-miR-130b-3p | 6.27E-04 | 0.004755625 | 1 | 0.5063375 | 0.3902219 | 0.1459471 | 3.0441247 | 0.9317452 | 2.8090063 | 0.99998 | CAGTGCAATGATGAAAGGGCAT |
| mmu-miR-125b-5p | 6.75E-04 | 0.005008493 | 1 | 0.2615703 | 0.602216 | 0.1009059 | 0.3162235 | 0.0351576 | 0.4942301 | 0.0759235 | TCCCTGAGACCCTAACTGTGA |
| mmu-miR-145a-3p | 6.77E-04 | 0.005008493 | 1 | 0.0664913 | 1.3256934 | 0.1505205 | 0.6756536 | 0.0903052 | 0.6451689 | 0.1304375 | GGATTCTGGAAATACTGTCTCT |
| mmu-miR-1193-3p | 7.06E-04 | 0.005131305 | 1 | 0.2535784 | 1.808854 | 0.6342052 | 0.6718077 | 0.2675109 | 3.7330045 | 0.8049799 | TAGTCCACCGTTTTACTATC |
| mmu-miR-181c-5p | 7.11E-04 | 0.005131305 | 1 | 0.1711084 | 0.902911 | 0.1426848 | 0.5856032 | 0.1623561 | 0.3183347 | 0.0794569 | AACATTCAACCTGTGCGGTGAGT |
| mmu-miR-669c-5p | 7.53E-04 | 0.005368925 | 1 | 0.3905979 | 0.8600733 | 0.229576 | 3.8504176 | 1.1115969 | 2.461776 | 0.3822116 | ATAGTTGTGTGTGGATGTGTGT |
| mmu-miR-21a-3p | 7.62E-04 | 0.005369281 | 1 | 0.9340874 | 5.2760077 | 2.7618646 | 15.400221 | 7.0625357 | 20.108678 | 4.3897202 | CAACAGCAGTCGATGGGCTGT |
| hsa-miR-320b | 7.95E-04 | 0.005511112 | 1 | 0.2189228 | 1.1937658 | 0.1912847 | 1.4762131 | 0.3631229 | 0.4490728 | 0.1131755 | AAAAGCTGGGTTGAGAGGGT |
| mmu-miR-365-3p | 8.01E-04 | 0.005511112 | 1 | 0.30881 | 0.5384289 | 0.0563338 | 0.3219968 | 0.0683889 | 0.309191 | 0.062356 | TAATGCCCTAAAAATCCTTAT |
| mmu-miR-361-5p | 8.31E-04 | 0.005651865 | 1 | 0.2585363 | 1.214897 | 0.108786 | 2.5187528 | 0.3208922 | 1.7109224 | 0.2354898 | TTATCAGAACTCCAGGGGTAC |
| mmu-miR-1a-1-5p | 8.64E-04 | 0.005810023 | 1 | 0.5504198 | 1.6179643 | 0.6028675 | 0.7709123 | 0.4339074 | 0.1381317 | 0.0368482 | ACATACTCTTTATATGCCATA |

| | | | | | | | | | | | |
|-------------------|----------|-------------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------------|
| mdo-miR-22-3p | 9.34E-04 | 0.006215807 | 1 | 0.2597698 | 3.4874247 | 0.4413912 | 2.1055126 | 0.1832964 | 2.034302 | 0.6535229 | CAGCTGCCAGTTGAAGAACTGC |
| ptr-miR-203 | 9.53E-04 | 0.006216654 | 1 | 0.4441403 | 0.570919 | 0.0756663 | 0.3749706 | 0.0370697 | 0.2519709 | 0.0313367 | TGAAATGTTTAGGACCACTAGAAT |
| ptr-let-7i | 9.56E-04 | 0.006216654 | 1 | 0.089807 | 1.0789105 | 0.0827996 | 1.5217702 | 0.2550633 | 1.624975 | 0.0551918 | TGAGGTAGTAGTTTTGTGCTGTT |
| mmu-miR-30c-5p | 9.80E-04 | 0.006306472 | 1 | 0.1339291 | 0.9809341 | 0.0244722 | 0.7775185 | 0.0205516 | 0.6348351 | 0.078099 | TGTAACATCCTCACTACCTGACCT |
| mmu-miR-99a-5p | 9.96E-04 | 0.006316442 | 1 | 0.0842003 | 1.5237995 | 0.1828551 | 0.8738889 | 0.2086207 | 0.5379115 | 0.1481965 | AACCCGTAGATCCGACTCTTGT |
| mmu-miR-532-5p | 1.00E-03 | 0.006316442 | 1 | 0.2361885 | 1.1308605 | 0.2618443 | 2.3098308 | 0.367316 | 2.316798 | 0.4282187 | CATGCCCTTGAGTGTAGGACCGT |
| mmu-miR-203-3p | 1.02E-03 | 0.006378673 | 1 | 0.0320972 | 0.7815985 | 0.0756983 | 0.6285213 | 0.0475543 | 0.5676929 | 0.1051031 | TGAAATGTTTAGGACCACTAGT |
| mmu-miR-369-5p | 1.06E-03 | 0.006515823 | 1 | 0.1892327 | 1.906397 | 0.3355055 | 1.2184863 | 0.2815081 | 2.689006 | 0.4215147 | AGATCGACCGTGTATATTCGC |
| mmu-mir-3470b-p5 | 1.11E-03 | 0.006661251 | 1 | 0.0282929 | 1.07393 | 0.0937758 | 1.9358043 | 0.4643978 | 0.7823614 | 0.1765447 | TGTAGCCCTGGCTGTCC |
| mmu-miR-133a-3p | 1.11E-03 | 0.006661251 | 1 | 0.5656919 | 2.0078005 | 1.0507723 | 0.6972099 | 0.3142804 | 0.1621058 | 0.0153855 | TTTGGTCCCTTCAACCAGCTGT |
| mmu-miR-872-3p | 1.14E-03 | 0.006738455 | 1 | 0.0921454 | 0.7905882 | 0.0106498 | 0.7117445 | 0.09328 | 1.1642097 | 0.1323534 | TGAACTATTGCAGTAGCCTCCT |
| hsa-miR-4448 | 1.17E-03 | 0.006738455 | 1 | 0.7641477 | 1.5148669 | 1.040295 | 13.416246 | 5.3000464 | 4.1536743 | 0.8637108 | GGCTCGTTGGTCTAGGGG |
| mmu-miR-10b-5p | 1.17E-03 | 0.006738455 | 1 | 0.1590404 | 0.9224281 | 0.4031696 | 0.302635 | 0.0911346 | 0.2060538 | 0.0682445 | TACCCTGTAGAACCGAATTTGT |
| mmu-miR-708-3p | 1.17E-03 | 0.006738455 | 1 | 0.2572063 | 1.2745179 | 0.1359119 | 0.7035791 | 0.1237406 | 0.5078613 | 0.0593653 | CAACTAGACTGTGAGCTTCTAGT |
| mmu-miR-125b-1-3p | 1.19E-03 | 0.006757886 | 1 | 0.3020723 | 2.709657 | 0.0590845 | 1.7070669 | 0.2485054 | 1.6080386 | 0.1214718 | ACGGGTTAGGCTCTGGGAGCT |
| mmu-miR-5099 | 1.20E-03 | 0.006757886 | 1 | 0.1587364 | 1.2776844 | 0.336601 | 3.3656113 | 0.9662659 | 1.6002579 | 0.1353409 | TCTTAGATCGATGTGGTGCTC |
| rno-miR-214-3p | 1.23E-03 | 0.006857908 | 1 | 0.0981375 | 0.8395052 | 0.2117344 | 0.8169993 | 0.1111326 | 1.8510233 | 0.2991751 | ACAGCAGGCACAGACAGGCAGT |
| mdo-miR-26-5pC | 1.26E-03 | 0.006997458 | 1 | 0.316483 | 0.7956475 | 0.0435024 | 0.3702769 | 0.0857739 | 0.4072611 | 0.0795074 | TTCAAGTAACCCAGGATAGGCT |
| mmu-miR-615-3p | 1.30E-03 | 0.007111274 | 1 | 0.1234199 | 1.0080731 | 0.2256506 | 0.8355923 | 0.1584079 | 2.4102891 | 0.5818651 | TCCGAGCCTGGGTCTCCCTCT |
| mmu-miR-340-3p | 1.31E-03 | 0.007111274 | 1 | 0.223756 | 1.1499104 | 0.1054169 | 2.0666786 | 0.2216629 | 1.3222915 | 0.1005315 | TCCGTCTCAGTTACTTTATAGC |
| mmu-miR-212-3p | 1.34E-03 | 0.007211834 | 1 | 0.650503 | 1.7846136 | 0.7098364 | 5.9406308 | 2.5047141 | 7.6220823 | 1.8044612 | TAACAGTCTCCAGTCACGGCC |
| mmu-miR-192-5p | 1.39E-03 | 0.007418295 | 1 | 0.1520014 | 1.2029768 | 0.1076329 | 1.3479674 | 0.0514551 | 0.7931981 | 0.0929728 | CTGACCTATGAATTGACAGCC |
| mmu-miR-337-5p | 1.40E-03 | 0.007418295 | 1 | 0.1743153 | 1.8870253 | 0.6741124 | 1.1635705 | 0.1782623 | 3.2104453 | 0.5461503 | CGGCGTCATGCAGGAGTTGATT |
| mmu-miR-673-5p | 1.45E-03 | 0.007570487 | 1 | 0.3511423 | 1.2538674 | 0.3364797 | 0.5105595 | 0.1806137 | 2.4970974 | 0.3003384 | CTCACAGCTCTGGTCTTTGAGC |
| mmu-miR-146b-3p | 1.48E-03 | 0.007673969 | 1 | 0.2384586 | 1.8645249 | 0.7113588 | 3.6254825 | 0.0704519 | 2.298739 | 0.3943435 | GCCCTAGGGACTCAGTTCTGGT |
| mmu-miR-299b-3p | 1.58E-03 | 0.008119127 | 1 | 0.5459631 | 1.8728109 | 0.4820067 | 1.1168657 | 0.2777005 | 4.8652691 | 1.3935738 | GTATGTGGGACGGTAAACCGCT |
| mmu-miR-329-5p | 1.63E-03 | 0.008214548 | 1 | 0.2896125 | 1.6732116 | 0.198918 | 0.8809755 | 0.2324953 | 2.4263452 | 0.4331832 | AGAGGTTTTCTGGGTCTCTGTTT |
| mmu-miR-423-3p | 1.63E-03 | 0.008214548 | 1 | 0.1233289 | 0.8636987 | 0.0333471 | 1.3855005 | 0.264183 | 1.4785747 | 0.0413327 | AGCTCGTCTGAGGCCCTCAGT |
| mmu-miR-1195 | 1.64E-03 | 0.008214548 | 1 | 0.3114472 | 2.1630132 | 0.8272173 | 6.9081157 | 1.4070997 | 1.6468567 | 0.8384273 | TGAGTTTCAGGCCAGCCTGGCT |
| mdo-miR-26-5p | 1.67E-03 | 0.008284584 | 1 | 0.4683106 | 0.5418045 | 0.1753635 | 0.2301134 | 0.0138412 | 0.229103 | 0.0290966 | CGTGGTTCAAGTAATCCAGATAGGCT |
| mmu-miR-199a-5p | 1.72E-03 | 0.008486035 | 1 | 0.0562269 | 0.7437197 | 0.1400344 | 0.4944118 | 0.1129725 | 1.2556766 | 0.2676846 | CCCAGTGTTTCAGACTACCTGTTC |
| mmu-miR-200c-3p | 1.79E-03 | 0.008741844 | 1 | 0.2116411 | 0.5786912 | 0.1911222 | 1.2939722 | 0.2034201 | 1.6404653 | 0.1749315 | TAATACTGCCGGTAATGATGGA |
| mmu-miR-329-3p | 1.82E-03 | 0.00874745 | 1 | 0.4003871 | 1.3164219 | 0.4512617 | 0.7721013 | 0.0459532 | 2.7046698 | 0.2062814 | AACACACCCAGCTAACCTTTTT |
| mmu-miR-3068-3p | 1.83E-03 | 0.00874745 | 1 | 0.0853513 | 1.3436764 | 0.1303298 | 0.8816311 | 0.1147326 | 0.7104505 | 0.1218952 | GGTGAATTGCAGTACTCCAAC |
| mmu-miR-3473d | 1.83E-03 | 0.00874745 | 1 | 0.0983948 | 0.6864788 | 0.4096885 | 1.5027072 | 0.221669 | 3.4271248 | 0.5691545 | CACTGAGCCACTTTCAGCCCT |
| mmu-miR-340-5p | 1.90E-03 | 0.008992678 | 1 | 0.4536075 | 2.6121444 | 1.098281 | 6.9295512 | 2.1219381 | 3.4206165 | 1.0923573 | TTATAAAGCAATGAGACTGATT |
| mmu-miR-125a-5p | 1.93E-03 | 0.00905272 | 1 | 0.3378152 | 0.5212082 | 0.1040373 | 0.2903637 | 0.0310685 | 0.4707845 | 0.0916847 | TCCCTGAGACCCTTTAACTGT |
| mmu-miR-328-3p | 1.94E-03 | 0.00905272 | 1 | 0.1269239 | 1.2531525 | 0.108406 | 1.073184 | 0.156667 | 0.7256735 | 0.0490708 | CTGGCCCTCTGCCCCCTCCGTT |
| mmu-miR-181d-5p | 1.96E-03 | 0.00905272 | 1 | 0.1154041 | 0.8370233 | 0.1188889 | 0.7635974 | 0.0925107 | 0.531843 | 0.0667381 | AACATTCATTGTTGTCGGTGGGT |
| mmu-miR-98-3p | 1.99E-03 | 0.009087899 | 1 | 0.2002938 | 0.9050202 | 0.1561054 | 0.9469613 | 0.2892732 | 2.4031906 | 0.3844809 | CTATACTACTACTTTCT |
| mmu-miR-335-5p | 2.00E-03 | 0.009087899 | 1 | 0.1500362 | 1.5836286 | 0.3175577 | 0.3961481 | 0.2564381 | 1.6974553 | 0.4220364 | TCAAGAGCAATAACGAAAAATGT |
| mmu-miR-221-3p | 2.05E-03 | 0.009198708 | 1 | 0.0451682 | 0.9441157 | 0.0433964 | 1.4548521 | 0.2312642 | 1.3346873 | 0.1339009 | AGCTACATTGTCTGCTGGGTTTC |
| mmu-miR-132-5p | 2.07E-03 | 0.009198708 | 1 | 0.7180719 | 4.5208297 | 2.2352513 | 8.8163452 | 2.5033658 | 15.456815 | 2.1802049 | ACCGTGCTTTCGATTGTTACT |

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|-------------------|----------|-------------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------------|
| mmu-miR-30c-2-3p | 2.08E-03 | 0.009198708 | 1 | 0.1992231 | 0.9653194 | 0.0988994 | 0.6472745 | 0.1060463 | 0.453801 | 0.0974637 | CTGGGAGAAGGCTGTTTACTCT |
| mmu-miR-193b-5p | 2.08E-03 | 0.009198708 | 1 | 0.0636888 | 0.9340729 | 0.098463 | 0.5763472 | 0.1918744 | 0.4791185 | 0.0592132 | CGGGGTTTTGAGGGCGAGATGA |
| cgr-miR-214-5p | 2.11E-03 | 0.00923999 | 1 | 0.2179683 | 0.8060234 | 0.100771 | 0.7994889 | 0.1596177 | 1.6202021 | 0.0989944 | TGCCTGTCTACACTTGTCTGTC |
| mmu-miR-152-3p | 2.18E-03 | 0.009485439 | 1 | 0.2107579 | 1.331513 | 0.1110373 | 1.2382011 | 0.116605 | 1.7990415 | 0.0460345 | TCAGTGCATGACAGATTGG |
| mmu-miR-10a-5p | 2.23E-03 | 0.009632311 | 1 | 0.1317609 | 0.9084143 | 0.3592673 | 0.5024623 | 0.1548674 | 0.2383207 | 0.0880976 | TACCCTGTAGATCCGAATTGT |
| mmu-miR-10a-3p | 2.25E-03 | 0.009632311 | 1 | 0.1532046 | 0.9745423 | 0.1714622 | 1.9002149 | 0.2383496 | 1.2308395 | 0.1886834 | CAAATTCGTATCTAGGGGAAT |
| mmu-miR-674-5p | 2.27E-03 | 0.009649775 | 1 | 0.1573378 | 0.7600588 | 0.1507554 | 1.231239 | 0.0935557 | 1.5412692 | 0.2082108 | GCACTGAGATGGGAGTGGTGTA |
| mmu-miR-434-5p | 2.38E-03 | 0.010064861 | 1 | 0.3704331 | 1.8505936 | 0.1136602 | 0.622515 | 0.2264647 | 1.9643819 | 0.349352 | GCTCGACTCATGGTTGAACCA |
| chi-miR-99b-3p | 2.46E-03 | 0.010323635 | 1 | 0.1695248 | 0.9689348 | 0.1332949 | 1.5792321 | 0.1267033 | 2.1772204 | 0.6362701 | CAAGCTCGTCTGTGGGTCCGT |
| mmu-miR-351-5p | 2.51E-03 | 0.010465544 | 1 | 0.0844893 | 1.4586638 | 0.3793304 | 0.9875856 | 0.2087979 | 2.4672966 | 0.6070181 | TCCCTGAGGAGCCCTTTGAGCCT |
| mmu-miR-379-5p | 2.58E-03 | 0.010688997 | 1 | 0.6197519 | 2.6005561 | 0.6625438 | 2.7930513 | 0.5480395 | 4.5700396 | 0.6675896 | TGGTAGACTATGGAACGTAGG |
| hsa-miR-4454 | 2.71E-03 | 0.011135146 | 1 | 0.311402 | 1.1938938 | 0.1763517 | 2.3062566 | 0.152184 | 1.8604314 | 0.3211017 | TCGGATCCGAGTACGGCACCA |
| mmu-miR-664-3p | 2.86E-03 | 0.011691663 | 1 | 0.4108561 | 1.3226349 | 0.1018787 | 0.6945605 | 0.123068 | 0.3892615 | 0.0571229 | TATTCATTTACTCCCAGCCT |
| mmu-miR-665-3p | 2.89E-03 | 0.011721564 | 1 | 0.6152815 | 1.8785085 | 1.0785012 | 1.2135596 | 0.7321664 | 7.6085242 | 0.9796893 | ACCAGGAGGCTGAGGTCCCTTA |
| mmu-miR-148b-5p | 2.94E-03 | 0.011779138 | 1 | 0.2371952 | 1.5091068 | 0.1941134 | 1.6384198 | 0.4292438 | 2.5139179 | 0.2235382 | GAAGTTCTGTTATACACTCAGGC |
| mmu-miR-107-3p | 2.94E-03 | 0.011779138 | 1 | 0.0588604 | 0.7637262 | 0.043722 | 0.7815476 | 0.1566574 | 0.5728624 | 0.0601727 | AGCAGCATTGTACAGGGCTATC |
| mmu-miR-574-3p | 3.08E-03 | 0.012233153 | 1 | 0.159976 | 0.7226952 | 0.056914 | 0.6026445 | 0.0536147 | 0.7100194 | 0.0608214 | CACGCTCATGCACACCCACA |
| mmu-miR-20a-5p | 3.18E-03 | 0.012458717 | 1 | 0.2842205 | 1.3300627 | 0.2187253 | 2.704159 | 0.4683716 | 2.3073174 | 0.6753191 | TAAAGTGCTTATAGTGCAGGTAG |
| rno-miR-181a-2-3p | 3.20E-03 | 0.012458717 | 1 | 0.2653292 | 1.5079592 | 0.560857 | 1.0365957 | 0.1916379 | 0.4258602 | 0.1266605 | ACCACCGACCGTTGACTGTACC |
| mmu-miR-24-2-5p | 3.29E-03 | 0.012747155 | 1 | 0.0415376 | 0.7326629 | 0.0577254 | 0.5196467 | 0.1204124 | 0.7367385 | 0.0788055 | GTGCCTACTGAGCTGAAACAGT |
| mmu-miR-210-3p | 3.34E-03 | 0.012844095 | 1 | 0.3060559 | 0.7264773 | 0.0703653 | 1.4910294 | 0.5197572 | 2.3399945 | 0.5231143 | CTGTGCGTGTGACAGCGGCTGA |
| mmu-miR-484 | 3.53E-03 | 0.013400543 | 1 | 0.1607864 | 0.6242116 | 0.0959694 | 0.5689294 | 0.1027721 | 0.9602006 | 0.0738081 | TCAGGCTCAGTCCCTCCCGAT |
| mmu-miR-221-5p | 3.53E-03 | 0.013400543 | 1 | 0.123451 | 1.3830767 | 0.4084483 | 0.7507778 | 0.1707078 | 0.5391125 | 0.0653802 | ACCTGGCATACAATGTAGATTTCTGT |
| rno-miR-378a-5p | 3.68E-03 | 0.013885205 | 1 | 0.1162085 | 1.2795807 | 0.4581227 | 0.7671961 | 0.1018661 | 0.4619925 | 0.1063637 | CTCCTGACTCCAGGTCCTGTGT |
| mmu-miR-15b-5p | 3.92E-03 | 0.014544485 | 1 | 0.254236 | 0.9961632 | 0.1559138 | 1.9864855 | 0.2866396 | 1.6486097 | 0.2356136 | TAGCAGCACATCATGGTTTACA |
| mmu-miR-3102-p3 | 3.93E-03 | 0.014544485 | 1 | 0.1217697 | 1.1231961 | 0.0398356 | 1.2453359 | 0.1695152 | 1.7391794 | 0.2926564 | GAGCACCCATTGGCTACCCACA |
| rno-miR-25-5p | 4.02E-03 | 0.014777333 | 1 | 0.2642865 | 0.5820014 | 0.1125325 | 1.3843085 | 0.3165579 | 1.3872368 | 0.2148243 | AGGCGGAGACTTGGCAATTGCT |
| rno-miR-874-3p | 4.04E-03 | 0.014777333 | 1 | 0.203448 | 1.6711652 | 0.1747096 | 0.9866017 | 0.1144491 | 1.2519861 | 0.0609583 | CTGCCCTGGCCGAGGGACCGAC |
| mmu-miR-1839-5p | 4.17E-03 | 0.015161566 | 1 | 0.0349554 | 1.2111516 | 0.0284152 | 1.3177189 | 0.1793922 | 0.9655972 | 0.063744 | AAGGTAGTAGAACAGTCTTGT |
| mmu-miR-3970 | 4.21E-03 | 0.015189612 | 1 | 0.0293925 | 1.6609021 | 0.6928908 | 2.5055393 | 0.1968514 | 1.2403072 | 0.1757495 | TGAGGTAGTAGTTTGTGCTT |
| mmu-miR-211-5p | 4.24E-03 | 0.015211967 | 1 | 0.2066138 | 0.5482685 | 0.2593193 | 0.4384779 | 0.0998019 | 0.2386098 | 0.0661386 | TTCCCTTTGTCATCCTTTGCTT |
| mmu-miR-495-3p | 4.32E-03 | 0.015413002 | 1 | 0.408068 | 1.5209092 | 0.4491724 | 0.8112002 | 0.2079628 | 3.2814585 | 0.9815277 | AAACAAACATGGTGCCTTCTT |
| mmu-miR-1247-5p | 4.37E-03 | 0.015475064 | 1 | 0.3893578 | 0.8500563 | 0.6325552 | 1.5219218 | 0.494682 | 8.504674 | 2.8816599 | ACCCGTCGCCGTTCCGCCGGA |
| mmu-miR-300-3p | 4.56E-03 | 0.016053992 | 1 | 0.3589051 | 1.9686281 | 0.7736451 | 1.2421537 | 0.5566182 | 3.8856108 | 0.6304635 | TATGCAAGGGCAAGCTCTCT |
| mmu-miR-28c | 4.62E-03 | 0.016168779 | 1 | 0.038418 | 2.5820541 | 0.5936916 | 2.346044 | 0.6593746 | 2.1849821 | 0.7020198 | AAGGAGCTCACAGTCTATTGAA |
| mmu-miR-99a-3p | 4.67E-03 | 0.016241055 | 1 | 0.3122041 | 0.5129538 | 0.0365709 | 0.34673 | 0.0542963 | 0.4371538 | 0.1392292 | CAAGCTCGTTTCTATGGGTCTGT |
| mmu-miR-23b-3p | 4.69E-03 | 0.016241055 | 1 | 0.1794263 | 0.711159 | 0.0856286 | 0.6373715 | 0.1060278 | 0.4965126 | 0.0713242 | ATCACATTGCCAGGGATTACC |
| mmu-miR-676-5p | 4.75E-03 | 0.016241143 | 1 | 0.1366818 | 0.784872 | 0.1113213 | 0.6072587 | 0.0551504 | 0.6484576 | 0.0842404 | ACTTACAACCTTAGGACTTGC |
| mmu-miR-224-5p | 4.75E-03 | 0.016241143 | 1 | 0.1463129 | 1.2226207 | 0.2474027 | 1.0545799 | 0.3656132 | 2.3652663 | 0.1931441 | TAAGTCACTAGTGGTCCGTTT |
| mmu-miR-712-5p | 4.87E-03 | 0.016575598 | 1 | 0.2597698 | 0.8459174 | 0.5202588 | 2.1886211 | 0.4080564 | 4.0927353 | 0.7872991 | CTCCTTACCCGGGCGGTACCCGC |
| mmu-miR-382-3p | 4.95E-03 | 0.01673073 | 1 | 0.1506408 | 1.7382395 | 0.7143872 | 1.2238049 | 0.5702819 | 3.5159739 | 0.6977001 | AATCATTACGGACAACACTTT |
| mmu-miR-222-3p | 4.99E-03 | 0.016771314 | 1 | 0.1176075 | 1.1978463 | 0.2587777 | 2.0301863 | 0.5529001 | 1.8339041 | 0.1542446 | AGCTACATCTGGCTACTGGTCTCT |
| hsa-miR-7977 | 5.20E-03 | 0.017391405 | 1 | 0.3892841 | 0.7436631 | 0.5078532 | 3.682947 | 0.9320637 | 6.1648424 | 4.1107003 | CCCGGCCAACGCACCA |

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|------------------|----------|-------------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------------------|
| mmu-miR-582-3p | 5.29E-03 | 0.017519612 | 1 | 0.290331 | 1.0502508 | 0.1731728 | 2.1214745 | 0.0970939 | 1.7353721 | 0.4044018 | AACCTGTTGAACAACCTGAACCC |
| mmu-miR-342-3p | 5.30E-03 | 0.017519612 | 1 | 0.1179536 | 0.9414646 | 0.0667833 | 0.8569387 | 0.2121842 | 1.5077798 | 0.1103269 | TCTCACACAGAAATCGCACCCCGT |
| mmu-miR-496a-3p | 5.40E-03 | 0.017755774 | 1 | 0.4757403 | 2.0560373 | 0.5377885 | 1.0840162 | 0.4024521 | 3.6266225 | 0.7492749 | AGTATTACATGGCCAATCTCC |
| mmu-miR-409-5p | 5.61E-03 | 0.018344963 | 1 | 0.3589175 | 2.4981159 | 0.2016965 | 0.7784754 | 0.2953417 | 1.6410004 | 0.3760255 | AGGTTACCCGAGCAACTTTGCAT |
| mmu-miR-194-5p | 5.67E-03 | 0.018413039 | 1 | 0.2302868 | 1.386207 | 0.2040148 | 2.9052787 | 0.8708733 | 1.2588619 | 0.3962527 | TGTAACAGCAACTCCATGTGGA |
| mmu-miR-6538 | 5.70E-03 | 0.018413039 | 1 | 0.2999702 | 1.9440028 | 1.1436939 | 7.041941 | 0.7296326 | 1.6147006 | 1.2666139 | CGCGGGCTCCGGGGC |
| bta-miR-378 | 5.72E-03 | 0.018413039 | 1 | 0.1181157 | 2.224835 | 0.4944649 | 1.491496 | 0.2974698 | 1.4148635 | 0.2538082 | CCTGGACTTGGAGTCAGAAGGCT |
| mmu-miR-17-5p | 5.92E-03 | 0.018934664 | 1 | 0.3303307 | 1.225979 | 0.0878724 | 2.4548547 | 0.4177761 | 2.1884502 | 0.6963248 | CAAAGTGCTTACAGTGCAGGTAG |
| mmu-miR-542-5p | 6.09E-03 | 0.019328376 | 1 | 0.2671163 | 0.9438729 | 0.2503843 | 2.0347155 | 0.7322074 | 3.6774023 | 1.8229044 | CTCGGGGATCATCATGTACCGA |
| mmu-miR-144-3p | 6.11E-03 | 0.019328376 | 1 | 1.015959 | 15.691404 | 5.7180296 | 14.157613 | 5.8400912 | 9.5186871 | 7.2860747 | TACAGTATAGATGATGTAC |
| mmu-miR-5126 | 6.17E-03 | 0.019437069 | 1 | 0.537093 | 1.3774477 | 1.2077884 | 5.6867813 | 2.6253156 | 11.344691 | 6.8201904 | GCGCGGGCGGGCCGGGGG |
| mmu-miR-450a-5p | 6.53E-03 | 0.020443501 | 1 | 0.1633147 | 1.3582107 | 0.3034625 | 1.7743298 | 0.5885427 | 2.4361341 | 0.2770026 | TTTTGCGATGTGTTCCATAATAT |
| chi-miR-326-5p | 6.73E-03 | 0.020875338 | 1 | 0.135016 | 0.8610848 | 0.3711388 | 3.5847342 | 1.1754849 | 2.472339 | 1.33005 | CCTCATCTGTCTGTTGGGCT |
| mmu-miR-145a-5p | 6.74E-03 | 0.020875338 | 1 | 0.3201111 | 0.5908406 | 0.1324421 | 0.4066126 | 0.0381804 | 0.4020431 | 0.0867146 | GTCCAGTTTTCCAGGAATCCCTC |
| mmu-miR-26a-2-3p | 7.08E-03 | 0.021675393 | 1 | 0.281269 | 0.8414142 | 0.1863195 | 0.4389714 | 0.0697446 | 0.6806672 | 0.0903391 | CCTGTTCTTGATTACTTGTTTC |
| mmu-miR-467c-5p | 7.13E-03 | 0.021675393 | 1 | 1.7295242 | 14.536997 | 8.7645475 | 54.71416 | 17.898221 | 54.421037 | 16.03314 | TAAGTGCCTGCATGTATATGTG |
| mmu-miR-378d | 7.14E-03 | 0.021675393 | 1 | 0.1008627 | 1.5725206 | 0.670377 | 1.0099429 | 0.1594194 | 0.5648632 | 0.0993916 | ACTGGACTTGGAGTCAGAAGGT |
| mmu-miR-425-5p | 7.23E-03 | 0.021826036 | 1 | 0.0602518 | 0.8879042 | 0.0848391 | 1.3755272 | 0.3227571 | 1.4868228 | 0.1988631 | AATGACACGATCACTCCCGTTG |
| oan-miR-1386 | 7.28E-03 | 0.021866895 | 1 | 0.3165177 | 0.6010565 | 0.1744502 | 1.1495189 | 0.1175332 | 1.4544761 | 0.1191957 | TCGGCTCCTGGCTGGCTCGCCA |
| mmu-miR-126a-3p | 7.49E-03 | 0.022391448 | 1 | 0.0215421 | 0.9507635 | 0.149753 | 0.7171073 | 0.0887186 | 1.0394132 | 0.0551625 | TCGTACCGTGAGTAATAATGC |
| mmu-miR-143-3p | 7.68E-03 | 0.022860619 | 1 | 0.1535765 | 1.365799 | 0.0735043 | 0.9270947 | 0.122811 | 0.7927775 | 0.1444706 | TGAGATGAAGCACTGTAGCT |
| mmu-miR-23a-5p | 7.95E-03 | 0.023527499 | 1 | 0.3219745 | 2.5127578 | 0.5520956 | 4.1096851 | 1.8863033 | 3.4214251 | 1.0696368 | GGGGTTCTGGGGATGGGATTT |
| mmu-miR-652-3p | 8.19E-03 | 0.024134283 | 1 | 0.2428944 | 0.5902822 | 0.0065492 | 1.1529782 | 0.2409497 | 0.7848517 | 0.0659197 | AATGGCGCCACTAGGGTTGTGA |
| mmu-miR-410-3p | 8.43E-03 | 0.024518561 | 1 | 0.5015998 | 1.6942188 | 0.814943 | 0.6646572 | 0.1790523 | 2.7903132 | 0.6988702 | AATATAACACAGATGGCCTGT |
| sha-miR-24 | 8.44E-03 | 0.024518561 | 1 | 0.4842972 | 0.4684974 | 0.145966 | 0.2489231 | 0.0897534 | 0.2578385 | 0.0529081 | ATCTGGCTCAGTTCAGCAGGAAC |
| mmu-miR-182-5p | 8.45E-03 | 0.024518561 | 1 | 0.2686847 | 0.7024421 | 0.2078117 | 0.4429616 | 0.1025267 | 0.3596214 | 0.0924438 | TTTGCAATGGTAGAACTCACACC |
| mmu-miR-191-3p | 8.51E-03 | 0.024573195 | 1 | 0.4289188 | 1.4298961 | 0.2257558 | 2.2769702 | 0.5749977 | 2.576579 | 0.4763858 | GCTGCACTTGGATTTTCGTTT |
| mmu-miR-222-5p | 8.73E-03 | 0.02508042 | 1 | 0.4709523 | 2.1596529 | 0.3088697 | 2.8272898 | 0.5811644 | 1.4341556 | 0.302107 | GGCTCAGTAGCCAGTGTAGATC |
| mmu-miR-1948-3p | 9.03E-03 | 0.02581485 | 1 | 0.3910427 | 0.4915103 | 0.2384145 | 0.6470618 | 0.2539182 | 2.4898556 | 0.8791734 | TTTAGGCAGAGCACTCGTACAG |
| mmu-miR-8112 | 9.22E-03 | 0.026240084 | 1 | 0.1599005 | 0.5739454 | 0.1055694 | 0.9834943 | 0.1051947 | 0.8473933 | 0.148724 | TCTCGCCACCTCCACCCGAGC |
| hsa-miR-1261 | 9.63E-03 | 0.027284151 | 1 | 0.3119386 | 2.0406684 | 1.2278387 | 4.9569668 | 0.3904987 | 2.7144925 | 1.080898 | TGGATAAGGCATTGGC |
| mmu-miR-434-3p | 9.89E-03 | 0.027871135 | 1 | 0.2642263 | 2.5101291 | 1.2272849 | 0.9134584 | 0.1174769 | 1.4230546 | 0.1173335 | TTTGAACCATCACTCGACTCT |

notes:

adj P: Benjamini-Hochberg adjusted P value.

Supplementary Table S5: 18-concurrent wound healing associated microRNA signature ^a

| miRNA | tissue | p-value | adj P ^b | 0 hr | | 6 hr | | 24 hr | | 5 day | |
|-----------------|--------|----------|--------------------|------|-------|------|-------|-------|-------|-------|-------|
| | | | | fold | stdev | fold | stdev | fold | stdev | fold | stdev |
| mmu-miR-148b-3p | skin | 1.21E-05 | 0.000596 | 1.00 | 0.12 | 1.44 | 0.18 | 3.64 | 0.79 | 2.83 | 0.22 |
| | oral | 3.56E-03 | 0.132005 | 1.00 | 0.1 | 1.3 | 0.4 | 2.42 | 0.97 | 3.25 | 0.63 |
| mmu-miR-31-5p | skin | 5.45E-05 | 0.001096 | 1.00 | 0.32 | 0.67 | 0.42 | 0.84 | 0.39 | 11.7 | 1.8 |
| | oral | 6.65E-03 | 0.151662 | 1.00 | 0.07 | 0.8 | 0.22 | 0.95 | 0.08 | 1.49 | 0.12 |
| mmu-miR-23b-3p | skin | 4.69E-03 | 0.016241 | 1.00 | 0.18 | 0.71 | 0.09 | 0.64 | 0.11 | 0.5 | 0.07 |
| | oral | 7.19E-03 | 0.151662 | 1.00 | 0.11 | 0.74 | 0.05 | 1.03 | 0.12 | 0.99 | 0.07 |
| mmu-miR-200c-3p | skin | 1.79E-03 | 0.008742 | 1.00 | 0.21 | 0.58 | 0.19 | 1.29 | 0.2 | 1.64 | 0.17 |
| | oral | 9.24E-03 | 0.163277 | 1.00 | 0.16 | 0.87 | 0.21 | 1.77 | 0.58 | 1.88 | 0.19 |
| mmu-miR-195a-5p | skin | 5.56E-05 | 0.001096 | 1.00 | 0.15 | 1.09 | 0.14 | 0.61 | 0.04 | 0.43 | 0.05 |
| | oral | 9.79E-03 | 0.163277 | 1.00 | 0.11 | 0.91 | 0.06 | 0.88 | 0.15 | 0.66 | 0.05 |
| mmu-miR-3068-5p | skin | 4.23E-05 | 0.001042 | 1.00 | 0.17 | 0.63 | 0.05 | 2.02 | 0.53 | 2.54 | 0.38 |
| | oral | 2.27E-04 | 0.075263 | 1.00 | 0.26 | 1.07 | 0.39 | 3.53 | 0.81 | 3.69 | 0.14 |
| mmu-miR-30a-3p | skin | 1.03E-04 | 0.001644 | 1.00 | 0.18 | 1.26 | 0.16 | 0.67 | 0.11 | 0.38 | 0.06 |
| | oral | 6.92E-04 | 0.086715 | 1.00 | 0.09 | 1.05 | 0.06 | 0.78 | 0.02 | 0.83 | 0.03 |
| mmu-miR-17-5p | skin | 5.92E-03 | 0.018935 | 1.00 | 0.33 | 1.23 | 0.09 | 2.46 | 0.42 | 2.19 | 0.7 |
| | oral | 7.15E-04 | 0.086715 | 1.00 | 0.16 | 0.85 | 0.05 | 1.51 | 0.16 | 0.99 | 0.05 |
| mmu-miR-676-5p | skin | 4.75E-03 | 0.016241 | 1.00 | 0.14 | 0.78 | 0.11 | 0.6 | 0.05 | 0.65 | 0.08 |
| | oral | 1.52E-03 | 0.107584 | 1.00 | 0.06 | 1.25 | 0.13 | 1.53 | 0.16 | 1.57 | 0.18 |
| mmu-miR-362-5p | skin | 4.65E-08 | 0.000014 | 1.00 | 0.08 | 0.64 | 0.09 | 4.28 | 0.43 | 5.58 | 0.87 |
| | oral | 2.07E-03 | 0.107584 | 1.00 | 0.4 | 0.84 | 0.4 | 3.27 | 1.37 | 4.29 | 0.88 |
| mmu-miR-434-3p | skin | 9.89E-03 | 0.027871 | 1.00 | 0.26 | 2.51 | 1.23 | 0.91 | 0.12 | 1.42 | 0.12 |
| | oral | 2.33E-03 | 0.111088 | 1.00 | 0.09 | 1.32 | 0.08 | 0.8 | 0.14 | 0.99 | 0.06 |
| mmu-miR-20a-5p | skin | 3.18E-03 | 0.012459 | 1.00 | 0.28 | 1.33 | 0.22 | 2.7 | 0.47 | 2.31 | 0.68 |
| | oral | 2.80E-03 | 0.123245 | 1.00 | 0.14 | 1.11 | 0.06 | 1.72 | 0.35 | 1.45 | 0.02 |
| mmu-miR-425-3p | skin | 8.08E-05 | 0.001402 | 1.00 | 0.24 | 0.61 | 0.18 | 2.12 | 0.1 | 2.23 | 0.22 |
| | oral | 3.55E-03 | 0.132006 | 1.00 | 0.15 | 0.8 | 0.34 | 1.59 | 0.01 | 1.91 | 0.13 |
| mmu-miR-340-5p | skin | 1.90E-03 | 0.008993 | 1.00 | 0.45 | 2.61 | 1.1 | 6.93 | 2.12 | 3.42 | 1.09 |
| | oral | 3.71E-03 | 0.132006 | 1.00 | 0.09 | 2.05 | 0.49 | 1.28 | 0.24 | 1.1 | 0.16 |
| mmu-miR-664-3p | skin | 2.86E-03 | 0.011692 | 1.00 | 0.41 | 1.32 | 0.1 | 0.69 | 0.12 | 0.39 | 0.06 |
| | oral | 4.08E-03 | 0.132006 | 1.00 | 0.08 | 0.93 | 0.03 | 0.77 | 0.15 | 0.64 | 0.05 |
| mmu-miR-7a-5p | skin | 5.29E-05 | 0.001096 | 1.00 | 0.3 | 1.87 | 0.13 | 5.41 | 0.81 | 5.67 | 1.74 |
| | oral | 4.95E-03 | 0.134730 | 1.00 | 0.12 | 1.4 | 0.34 | 2.04 | 0.38 | 1.53 | 0.12 |
| mmu-miR-193b-3p | skin | 2.63E-05 | 0.000844 | 1.00 | 0.08 | 0.74 | 0.05 | 0.53 | 0.11 | 0.24 | 0.05 |
| | oral | 5.61E-03 | 0.142362 | 1.00 | 0.11 | 0.58 | 0.06 | 0.62 | 0.1 | 0.59 | 0.11 |
| mmu-miR-223-3p | skin | 7.01E-05 | 0.001296 | 1.00 | 0.19 | 3.47 | 1.05 | 21.9 | 7.09 | 5.34 | 2.8 |
| | oral | 7.42E-03 | 0.151663 | 1.00 | 0.08 | 2.66 | 0.86 | 3.72 | 2.46 | 1.07 | 0.17 |

^a Cut-off p-value of 0.01 was used. 18 microRNAs that were concurrently differentially expressed in both skin and oral mucosa wound healing were listed.

^b The Benjamini-Hochberg adjusted P-values were computed for multiple hypothesis testing.

Supplementary Table S6: Expression changes of the top 10 baseline tissue specific microRNAs in skin and oral mucosa during wound healing

| miR | miR-378a-3p | | | |
|--------------|-------------|----------|----------|-----------|
| time course | 0hr | 6hr | 24hr | 5day |
| skin (fold) | 1 | 1.469336 | 0.939103 | 0.8457584 |
| skin (stdev) | 0.012098 | 0.518862 | 0.138471 | 0.087231 |
| p value | | | | 5.26E-02 |
| oral (fold) | 0.396452 | 0.290532 | 0.378565 | 0.4084093 |
| oral (stdev) | 0.026353 | 0.013767 | 0.020421 | 0.0358472 |
| p value | | | | 8.18E-04 |

| miR | miR-31-5p | | | |
|--------------|-----------|----------|----------|-----------|
| time course | 0hr | 6hr | 24hr | 5day |
| skin (fold) | 1 | 0.669133 | 0.840812 | 11.688945 |
| skin (stdev) | 0.320248 | 0.422529 | 0.38847 | 1.7979082 |
| p value | | | | 5.45E-05 |
| oral (fold) | 22.85125 | 18.31651 | 21.60025 | 33.972947 |
| oral (stdev) | 1.692528 | 5.048494 | 1.765137 | 2.6370834 |
| p value | | | | 6.65E-03 |

| miR | miR-10a-5p | | | |
|--------------|------------|----------|----------|-----------|
| time course | 0hr | 6hr | 24hr | 5day |
| skin (fold) | 1 | 0.908414 | 0.502462 | 0.2383207 |
| skin (stdev) | 0.131761 | 0.359267 | 0.154867 | 0.0880976 |
| p value | | | | 2.23E-03 |
| oral (fold) | 0.00482 | 0.006927 | 0.00965 | 0.0074661 |
| oral (stdev) | 0.002255 | 0.004842 | 0.005031 | 0.0046497 |
| p value | | | | 5.64E-01 |

| miR | miR-10b-5p | | | |
|--------------|------------|----------|----------|-----------|
| time course | 0hr | 6hr | 24hr | 5day |
| skin (fold) | 1 | 0.922428 | 0.302635 | 0.2060538 |
| skin (stdev) | 0.15904 | 0.40317 | 0.091135 | 0.0682445 |
| p value | | | | 1.17E-03 |
| oral (fold) | 0.163878 | 0.150159 | 0.147039 | 0.1517026 |
| oral (stdev) | 0.0479 | 0.048789 | 0.039186 | 0.027659 |
| p value | | | | 9.67E-01 |

| miR | miR-133a-3p | | | |
|--------------|-------------|----------|---------|-----------|
| time course | 0hr | 6hr | 24hr | 5day |
| skin (fold) | 1 | 2.0078 | 0.69721 | 0.1621058 |
| skin (stdev) | 0.565692 | 1.050772 | 0.31428 | 0.0153855 |

| | | | | |
|--------------|----------|----------|----------|-----------|
| p value | 1.11E-03 | | | |
| oral (fold) | 0.07094 | 0.009774 | 0.014111 | 0.014214 |
| oral (stdev) | 0.030147 | 0.012295 | 0.012636 | 0.0068159 |
| p value | 6.78E-02 | | | |

| miR | miR-146b-5p | | | |
|--------------|-------------|----------|----------|-----------|
| time course | 0hr | 6hr | 24hr | 5day |
| skin (fold) | 1 | 1.35334 | 1.779497 | 1.273712 |
| skin (stdev) | 0.098454 | 0.216424 | 0.375257 | 0.2865286 |
| p value | 2.65E-02 | | | |
| oral (fold) | 0.161831 | 0.219098 | 0.364548 | 0.2856465 |
| oral (stdev) | 0.04531 | 0.07541 | 0.148361 | 0.1047957 |
| p value | 1.06E-01 | | | |

| miR | miR-126a-5p | | | |
|--------------|-------------|----------|----------|-----------|
| time course | 0hr | 6hr | 24hr | 5day |
| skin (fold) | 1 | 1.53879 | 0.936007 | 1.5421504 |
| skin (stdev) | 0.142881 | 0.277857 | 0.32267 | 0.2875119 |
| p value | 4.75E-02 | | | |
| oral (fold) | 1.864485 | 2.169465 | 1.86865 | 1.3459816 |
| oral (stdev) | 0.286606 | 0.512187 | 0.720687 | 0.2903343 |
| p value | 2.11E-01 | | | |

| miR | miR-34c-5p | | | |
|--------------|------------|----------|----------|-----------|
| time course | 0hr | 6hr | 24hr | 5day |
| skin (fold) | 1 | 1.890395 | 3.441682 | 35.217775 |
| skin (stdev) | 0.354481 | 0.313367 | 0.59346 | 29.988102 |
| p value | 1.23E-04 | | | |
| oral (fold) | 83.6016 | 156.4728 | 64.88194 | 46.964317 |
| oral (stdev) | 69.09045 | 154.963 | 77.05825 | 36.915668 |
| p value | 6.81E-01 | | | |

| miR | miR-30a-5p | | | |
|--------------|------------|----------|----------|-----------|
| time course | 0hr | 6hr | 24hr | 5day |
| skin (fold) | 1 | 1.251449 | 0.582879 | 0.453159 |
| skin (stdev) | 0.103088 | 0.111781 | 0.022601 | 0.0342868 |
| p value | 9.89E-07 | | | |
| oral (fold) | 0.611179 | 0.775242 | 0.580714 | 0.5359318 |
| oral (stdev) | 0.022063 | 0.210435 | 0.080197 | 0.032217 |
| p value | 9.47E-02 | | | |

| miR | miR-96-5p | | | |
|-----|-----------|--|--|--|
|-----|-----------|--|--|--|

| time course | 0hr | 6hr | 24hr | 5day |
|--------------|----------|----------|----------|-----------|
| skin (fold) | 1 | 1.059792 | 0.343601 | 0.2286068 |
| skin (stdev) | 0.14515 | 0.384041 | 0.045746 | 0.049049 |
| p value | | | | 1.60E-04 |
| oral (fold) | 0.577801 | 0.720975 | 0.692673 | 0.3836004 |
| oral (stdev) | 0.076565 | 0.080358 | 0.360337 | 0.0445133 |
| p value | | | | 1.40E-01 |

Supplementary Table S7: Statistical analysis on TaqMan assay-based differential expression of miR-21 and miR-101

A: Validation of differential expression in tissue samples

A.1: miR-21 in tissue samples

A.1.a: 2way ANOVA - miR-21 in tissue samples

| Two-way ANOVA | | Ordinary | | Alpha | | 0.05 | |
|-----------------------------|-------|----------|-------|-------------------|------------|------|--|
| ANOVA table | SS | DF | MS | F (Dfn, Dfd) | P value | | |
| Interaction | 51.13 | 3 | 17.04 | F (3, 76) = 5.132 | P = 0.0028 | | |
| Row Factor (time) | 156.7 | 3 | 52.22 | F (3, 76) = 15.72 | P < 0.0001 | | |
| Column Factor (tissue type) | 27.26 | 1 | 27.26 | F (1, 76) = 8.209 | P = 0.0054 | | |
| Residual | 252.4 | 76 | 3.321 | | | | |

A.1.b: Multiple t tests - miR-21 in tissue samples

| | | Mean (skin) | | Mean (oral) | | (statistical significance determined by Holm-Sidak method) | |
|-------|-------|-------------|---------|-------------|--|--|--------------|
| | Row | | | | | P value | significance |
| 0 hr | Row 1 | 1 | 1.03525 | 0.880149 | | | |
| 6 hr | Row 2 | 1.10854 | 1.03525 | 0.784571 | | | |
| 24 hr | Row 3 | 1.79576 | 1.09139 | 0.0493723 * | | | |
| 5 day | Row 4 | 6.47986 | 2.49812 | 0.0415756 * | | | |

A.1.c: Shapiro-Wilk tests - miR-21 in tissue samples

| | | skin | | oral | |
|-------|-------|----------|--------|----------|--------|
| | Row | P value | Null | P value | Null |
| 0 hr | Row 1 | 0.427686 | Accept | 0.436846 | Accept |
| 6 hr | Row 2 | 0.090062 | Accept | 0.000623 | Reject |
| 24 hr | Row 3 | 0.569615 | Accept | 0.371813 | Accept |
| 5 day | Row 4 | 0.015668 | Reject | 0.145458 | Accept |

A.2: miR-10b in tissue samples

A.2.a: 2way ANOVA - miR-10b in tissue samples

| Two-way ANOVA | | Ordinary | | Alpha | | 0.05 | |
|-----------------------------|-------|----------|---------|-------------------|------------|------|--|
| ANOVA table | SS | DF | MS | F (Dfn, Dfd) | P value | | |
| Interaction | 2.886 | 3 | 0.962 | F (3, 72) = 13.15 | P < 0.0001 | | |
| Row Factor (time) | 2.887 | 3 | 0.9625 | F (3, 72) = 13.16 | P < 0.0001 | | |
| Column Factor (tissue type) | 7.154 | 1 | 7.154 | F (1, 72) = 97.81 | P < 0.0001 | | |
| Residual | 5.266 | 72 | 0.07314 | | | | |

A.2.b: Multiple t tests - miR-10b in tissue samples

| | | Mean (skin) | | Mean (oral) | | (statistical significance determined by Holm-Sidak method) | |
|-------|-------|-------------|-----------|--------------|--|--|--------------|
| | Row | | | | | P value | significance |
| 0 hr | Row 1 | 1 | 0.061636 | 0.00066664 * | | | |
| 6 hr | Row 2 | 1.07812 | 0.047931 | 2.59E-07 * | | | |
| 24 hr | Row 3 | 0.296832 | 0.0577083 | 0.00358784 * | | | |
| 5 day | Row 4 | 0.268708 | 0.0485352 | 0.0162982 * | | | |

A.2.c: Shapiro-Wilk tests - miR-10b in tissue samples

| | | skin | | oral | |
|-------|-------|----------|--------|----------|--------|
| | Row | P value | Null | P value | Null |
| 0 hr | Row 1 | 0.23429 | Accept | 0.000416 | Reject |
| 6 hr | Row 2 | 0.988214 | Accept | 0.000035 | Reject |
| 24 hr | Row 3 | 0.008166 | Reject | 0.001878 | Reject |
| 5 day | Row 4 | 0.000341 | Reject | 0.004668 | Reject |

B: Validation of differential expression in LCM samples

B.1: miR-21 in LCM samples

B.1.a: 2way ANOVA - miR-21 in LCM samples

| Two-way ANOVA | | Ordinary | | Alpha | | 0.05 | |
|-----------------------------|-------|----------|-------|-------------------|------------|------|--|
| ANOVA table | SS | DF | MS | F (Dfn, Dfd) | P value | | |
| Interaction | 23.54 | 3 | 7.846 | F (3, 24) = 7.114 | P = 0.0014 | | |
| Row Factor (time) | 44.02 | 3 | 14.67 | F (3, 24) = 13.30 | P < 0.0001 | | |
| Column Factor (tissue type) | 23.56 | 1 | 23.56 | F (1, 24) = 21.36 | P = 0.0001 | | |
| Residual | 26.47 | 24 | 1.103 | | | | |

B.1.b: Multiple t tests - miR-21 in LCM samples

| | | Mean (skin) | | Mean (oral) | | (statistical significance determined by Holm-Sidak method) | |
|-------|-------|-------------|----------|--------------|--|--|--------------|
| | Row | | | | | P value | significance |
| 0 hr | Row 1 | 1.1444 | 0.235591 | 0.0153373 * | | | |
| 6 hr | Row 2 | 0.887953 | 0.131738 | 0.0163974 * | | | |
| 24 hr | Row 3 | 1.65043 | 1.12877 | 0.530282 | | | |
| 5 day | Row 4 | 5.80185 | 1.12458 | 0.00833249 * | | | |

B.1.c: Shapiro-Wilk tests - miR-21 in LCM samples

| | | skin | | oral | |
|-------|-------|----------|--------|----------|--------|
| | Row | P value | Null | P value | Null |
| 0 hr | Row 1 | 0.947874 | Accept | 0.025577 | Reject |
| 6 hr | Row 2 | 0.75682 | Accept | 0.083015 | Accept |
| 24 hr | Row 3 | 0.147838 | Accept | 0.018483 | Reject |
| 5 day | Row 4 | 0.897928 | Accept | 0.344031 | Accept |

B.2: miR-10b in LCM samples

B.2.a: 2way ANOVA - miR-10b in LCM samples

| Two-way ANOVA | | Ordinary | | Alpha | | 0.05 | |
|-----------------------------|-------|----------|---------|-------------------|------------|------|--|
| ANOVA table | SS | DF | MS | F (Dfn, Dfd) | P value | | |
| Interaction | 1.859 | 3 | 0.6195 | F (3, 24) = 7.070 | P = 0.0014 | | |
| Row Factor (time) | 1.836 | 3 | 0.612 | F (3, 24) = 6.984 | P = 0.0015 | | |
| Column Factor (tissue type) | 4.11 | 1 | 4.11 | F (1, 24) = 46.90 | P < 0.0001 | | |
| Residual | 2.103 | 24 | 0.08763 | | | | |

B.2.b: Multiple t tests - miR-10b in LCM samples

| | | Mean (skin) | | Mean (oral) | | (statistical significance determined by Holm-Sidak method) | |
|-------|-------|-------------|-----------|--------------|--|--|--------------|
| | Row | | | | | P value | significance |
| 0 hr | Row 1 | 1.17113 | 0.0627785 | 0.00229105 * | | | |
| 6 hr | Row 2 | 1.3093 | 0.028406 | 0.00742183 * | | | |
| 24 hr | Row 3 | 0.310278 | 0.04828 | 0.0565111 | | | |
| 5 day | Row 4 | 0.25989 | 0.044054 | 0.0814784 | | | |

B.2.c: Shapiro-Wilk tests - miR-10b in LCM samples

| | | skin | | oral | |
|-------|-------|----------|--------|----------|--------|
| | Row | P value | Null | P value | Null |
| 0 hr | Row 1 | 0.223427 | Accept | 0.469074 | Accept |
| 6 hr | Row 2 | 0.680263 | Accept | 0.412278 | Accept |
| 24 hr | Row 3 | 0.275825 | Accept | 0.22837 | Accept |
| 5 day | Row 4 | 0.048727 | Reject | 0.002357 | Reject |

Supplementary Table S8: Statistical analysis on closure of the wounds treated with miR-21 and miR-10b reagents

A: wounds treated with control and miR-21 mimic

A.1: 2way ANOVA - wounds treated with control and miR-21 mimic

| Two-way ANOVA | Ordinary | | | Alpha | |
|---------------------------|----------|-----|-------|--------------------|------------|
| | | | | 0.05 | |
| ANOVA table | SS | DF | MS | F (DFn, DFd) | P value |
| Interaction | 335.2 | 9 | 37.24 | F (9, 100) = 1.581 | P = 0.1312 |
| Row Factor (time) | 54038 | 9 | 6004 | F (9, 100) = 254.8 | P < 0.0001 |
| Column Factor (treatment) | 1216 | 1 | 1216 | F (1, 100) = 51.59 | P < 0.0001 |
| Residual | 2356 | 100 | 23.56 | | |

A.2: Multiple t tests - wounds treated with control and miR-21 mimic

(statistical significance determined by Holm-Sidak method)

| | Mean (ctrl) | Mean (miR-21) | P value | significance | Difference | SE of differ t ratio | df |
|--------|-------------|---------------|--------------|--------------|------------|----------------------|------------|
| day 1 | 28.5867 | 32.735 | 0.311891 | | -4.14833 | 3.89494 | 1.06506 10 |
| day 2 | 47.0717 | 51.395 | 0.210477 | | -4.32333 | 3.23082 | 1.33815 10 |
| day 3 | 54.3733 | 59.775 | 0.261995 | | -5.40167 | 4.54393 | 1.18876 10 |
| day 4 | 61.3967 | 72.4817 | 0.00110855 * | | -11.085 | 2.4525 | 4.51988 10 |
| day 5 | 68.465 | 79.685 | 0.00036866 * | | -11.22 | 2.13354 | 5.25886 10 |
| day 6 | 75.3533 | 84.1083 | 0.0126509 * | | -8.755 | 2.88828 | 3.03122 10 |
| day 7 | 82.2717 | 90.9317 | 0.00292527 * | | -8.66 | 2.21627 | 3.90747 10 |
| day 8 | 88.1333 | 94.6467 | 0.0391902 * | | -6.51333 | 2.74674 | 2.3713 10 |
| day 9 | 95.9417 | 98.8817 | 0.00687099 * | | -2.94 | 0.866929 | 3.39128 10 |
| day 10 | 98.97 | 99.5783 | 0.163996 | | -0.608334 | 0.405013 | 1.50201 10 |

A.3: Shapiro-Wilk tests - wounds treated with control and miR-21 mimic

| | ctrl | miR-21 |
|--------|-----------------|-----------------|
| | P value | Null |
| day 1 | 0.880938 Accept | 0.015552 Reject |
| day 2 | 0.048305 Reject | 0.354856 Accept |
| day 3 | 0.965486 Accept | 0.774883 Accept |
| day 4 | 0.676812 Accept | 0.591661 Accept |
| day 5 | 0.691616 Accept | 0.832817 Accept |
| day 6 | 0.340818 Accept | 0.486321 Accept |
| day 7 | 0.065263 Accept | 0.810627 Accept |
| day 8 | 0.482778 Accept | 0.409187 Accept |
| day 9 | 0.127901 Accept | 0.279401 Accept |
| day 10 | 0.129791 Accept | 0.180812 Accept |

B: wounds treated with control and miR-10b LNA

B.1: 2way ANOVA - wounds treated with control and miR-10b LNA

| Two-way ANOVA | Ordinary | | | Alpha | |
|---------------------------|----------|----|-------|--------------------|------------|
| | | | | 0.05 | |
| ANOVA table | SS | DF | MS | F (DFn, DFd) | P value |
| Interaction | 529.1 | 9 | 58.79 | F (9, 87) = 0.7714 | P = 0.6430 |
| Row Factor (time) | 84927 | 9 | 9436 | F (9, 87) = 123.8 | P < 0.0001 |
| Column Factor (treatment) | 1251 | 1 | 1251 | F (1, 87) = 16.42 | P = 0.0001 |
| Residual | 6630 | 87 | 76.21 | | |

B.2: Multiple t tests - wounds treated with control and miR-10b LNA

(statistical significance determined by Holm-Sidak method)

| | Mean (ctrl) | Mean (miR-10b) | P value | significance | Difference | SE of differ t ratio | df |
|--------|-------------|----------------|--------------|--------------|------------|----------------------|------------|
| day 1 | 11.2085 | 23.95 | 0.151825 | | -12.7414 | 8.13706 | 1.56585 9 |
| day 2 | 24.4597 | 33.2662 | 0.245699 | | -8.80655 | 7.09181 | 1.24179 9 |
| day 3 | 36.2235 | 48.8293 | 0.100135 | | -12.6058 | 6.87992 | 1.83227 9 |
| day 4 | 47.6599 | 52.779 | 0.434157 | | -5.11904 | 6.25346 | 0.818593 9 |
| day 5 | 54.4978 | 60.861 | 0.283508 | | -6.36319 | 5.57918 | 1.14052 9 |
| day 6 | 63.9945 | 70.4322 | 0.279583 | | -6.43774 | 5.41722 | 1.18838 6 |
| day 7 | 74.8959 | 87.2205 | 0.00296294 * | | -12.3246 | 3.0565 | 4.03225 9 |
| day 8 | 93.4787 | 97.2499 | 0.296344 | | -3.77115 | 3.4017 | 1.10861 9 |
| day 9 | 97.7562 | 98.1437 | 0.77031 | | -0.387475 | 1.28763 | 0.300922 9 |
| day 10 | 99.302 | 100 | 0.00186593 | | -0.69804 | 0.160682 | 4.34422 9 |

B.3: Shapiro-Wilk tests - wounds treated with control and miR-10b LNA

| | ctrl | miR-10b |
|--------|-----------------|-----------------|
| | P value | Null |
| day 1 | 0.079956 Accept | 0.829051 Accept |
| day 2 | 0.230435 Accept | 0.450255 Accept |
| day 3 | 0.096018 Accept | 0.758435 Accept |
| day 4 | 0.081085 Accept | 0.355892 Accept |
| day 5 | 0.240936 Accept | 0.131831 Accept |
| day 6 | 0.495443 Accept | 0.904362 Accept |
| day 7 | 0.659012 Accept | 0.248763 Accept |
| day 8 | 0.016694 Reject | 0.050619 Accept |
| day 9 | 0.907885 Accept | 0.017018 Reject |
| day 10 | 0.565286 Accept | NaN Reject |