|  |  |  |  |
| --- | --- | --- | --- |
| **Supplementary Table 1. Primers used in qPCR and MeRIP-qPCR** | | | |
| **Gene** | **Forward primer** | **Reverse primer** | **Product length (bp)** |
| Col1α1 | 5′-CTGGCGGTTCAGGTCCAAT-3′ | 5′-TTCCAGGCAATCCACGAGC-3′ | 141 |
| Col3α1 | 5′-CTGTAACATGGAAACTGGGGAAA-3′ | 5′-CCATAGCTGAACTGAAAACCACC-3′ | 145 |
| ACTB | 5′-GTGACGTTGACATCCGTAAAGA-3′ | 5′-GCCGGACTCATCGTACTCC-3′ | 245 |
| Cc13 | 5′-TCCACGCCAATTCATCGTTG-3′ | 5′-CAGGCATTCAGTTCCAGGTCAG-3′ | 153 |
| Cc19 | 5′-CAGAGACAAAAGAAGTCCAGAGC-3′ | 5′-GTCTTGAAAGCCCATGTGAAAC-3′ | 80 |
| Saa1 | 5′-AACTATGATGCTGCTCAAAGGG-3′ | 5′-AGGCCCCCAGCACAACCTA-3′ | 234 |
| Il1b | 5′-CTCGCAGCAGCACATCAACAA-3′ | 5′-AAGGTCCACGGGAAAGACACA-3′ | 99 |
| Hras | 5′-CAGCCGCTGTAGAAGCTATGA-3′ | 5′-ACCTGTTTCCGGTAGGAGTCC-3′ | 148 |
| Tnc | 5′-CAGCCATATTGAGGTGAAAG-3′ | 5′-GTGAGACACGGCGGAGATTC-3′ | 293 |
| Lama3 | 5′-CTGTGACTACTGCAATTCTGAGG-3′ | 5′-CAAGGTGAGGTTGACTTGATTGT-3′ | 133 |
| Stat3 | 5′-ACTTCAGACCCGCCAACA-3′ | 5′-CCAGCAACCTGACTTTCG-3′ | 236 |
| METTL3 | 5′-GGTTCGTTCCACCAGTCATA-3′ | 5′-CTAGTAGGTGTATCCCATCCAG-3′ | 155 |
| ALKBH5 | 5′-CGGTCATCATTCTCAGGAAGACA-3′ | 5′-GAGCTAAAACTCCCCCTCCG-3′ | 259 |
| GAPDH | 5′-CACTGAGCAAGAGAGGCCCTAT-3′ | 5′-GCAGCGAACTTTATTGATGGTATT-3′ | 144 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Supplementary Table 2. The quantification and quality of RNA in skin tissue of a mouse model of scleroderma\*** | | | | | | |
| **Sample** | **OD260/280 ratio** | **OD260/230 ratio** | **Conc. (ng/μl)** | **Volume (μl)** | **Quantity (ng)** | **QC Purity** |
| control 1 | 1.94 | 2.06 | 416.51 | 60 | 24990.60 | pass |
| control 2 | 1.99 | 2.30 | 966.22 | 80 | 77297.60 | pass |
| control 3 | 1.95 | 2.36 | 523.56 | 40 | 20942.40 | pass |
| control 4 | 2.01 | 2.24 | 1220.55 | 150 | 183082.50 | pass |
| BLM 1 | 2.00 | 2.28 | 851.64 | 100 | 85164.00 | pass |
| BLM 2 | 1.98 | 2.25 | 884.51 | 40 | 35380.40 | pass |
| BLM 3 | 2.00 | 2.31 | 1084.01 | 80 | 86720.80 | pass |
| BLM 4 | 1.98 | 2.22 | 717.27 | 60 | 43036.20 | pass |

\*the OD260/280 ratio should between 1.8 and 2.1 for pure RNA. The OD260/230 ratio should be more than 1.8.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Supplementary Table 3. The specific activity (pmol dye per μg cRNA) of the labeled RNA** | | | | | | |
| **Sample ID** | **Dye Name** | **Dye (pmol/μl)** | **cRNA Concentration (μg/μl)** | **Specific Activity (pmol dye/μg cRNA)\*** | **Volume (μl)** | **Total Amount (μg)** |
| control 1 sup | Cy3 | 5.63 | 0.49 | 11.50 | 10.00 | 4.89 |
| control 2 sup | Cy3 | 7.53 | 0.65 | 11.59 | 10.00 | 6.50 |
| control 3 sup | Cy3 | 5.56 | 0.49 | 11.32 | 10.00 | 4.91 |
| control 4 sup | Cy3 | 7.9 | 0.66 | 11.91 | 10.00 | 6.63 |
| BLM 1 sup | Cy3 | 6.18 | 0.51 | 12.13 | 10.00 | 5.10 |
| BLM 2 sup | Cy3 | 6.07 | 0.49 | 12.36 | 10.00 | 4.91 |
| BLM 3 sup | Cy3 | 5.74 | 0.47 | 12.18 | 10.00 | 4.71 |
| BLM 4 sup | Cy3 | 5.88 | 0.51 | 11.57 | 10.00 | 5.08 |
| control 1 IP | Cy5 | 4.78 | 0.53 | 9.09 | 10.00 | 5.26 |
| control 2 IP | Cy5 | 3.13 | 0.35 | 9.07 | 10.00 | 3.45 |
| control 3 IP | Cy5 | 4.18 | 0.40 | 10.37 | 10.00 | 4.03 |
| control 4 IP | Cy5 | 4.61 | 0.41 | 11.18 | 10.00 | 4.12 |
| BLM 1 IP | Cy5 | 4.55 | 0.41 | 11.22 | 10.00 | 4.05 |
| BLM 2 IP | Cy5 | 4.3 | 0.34 | 12.49 | 10.00 | 3.44 |
| BLM 3 IP | Cy5 | 3.49 | 0.33 | 10.50 | 10.00 | 3.33 |
| BLM 4 IP | Cy5 | 4.23 | 0.42 | 10.02 | 10.00 | 4.22 |

\*If the total amount is < 0.825 ng and the specific activity is < 8.0 pmol/μg, cRNA will not proceed to the hybridization step and cRNA preparation will be repeated.