

Supplementary Table S1. Target genes of miR-196a that have been validated experimentally (reporter assay, western blot or qPCR). Genes which have been previously associated with either osteogenesis or bone function are depicted in bold.

Gene	Gene Name	Function
<i>ANXA1</i> [1]	Annexin A1	calcium ion binding, receptor binding
<i>HOXB8</i> [2–4]	Homeobox protein Hox-B8	transcription factor activity, sequence-specific DNA binding and sequence-specific DNA binding
<i>HOXC8</i> [5,6]	Homeobox protein Hox-C8	transcription factor activity, sequence-specific DNA binding and sequence-specific DNA binding.
<i>HOXB7</i> [7–9]	Homeobox protein Hox-B7	transcription factor activity, sequence-specific DNA binding and sequence-specific DNA binding
<i>BACH1</i> [10,11]	BTB Domain and CNC Homolog 1	transcription factor activity, sequence-specific DNA binding and heme binding
<i>HMOX1</i> [12–19]	Heme Oxygenase 1	protein homodimerization activity and oxidoreductase activity
CDKN1B	Cyclin Dependent Kinase Inhibitor 1B	protein complex binding and protein phosphatase binding
HMGA1	High Mobility Group AT-Hook 1	enzyme binding , ligand-dependent nuclear receptor transcription coactivator activity.
<i>HMGA2</i> [20–23]	High mobility Group AT-Hook 2	enzyme binding , transcriptional activator activity, RNA polymerase II core promoter proximal region sequence-specific binding
<i>HOXA5</i> [24–26]	Homeobox A5	transcription factor activity, sequence-specific DNA binding and RNA polymerase II core promoter proximal region sequence-specific DNA binding
<i>FOXO1</i> [27–29]	Forkhead Box O1	transcription factor activity, sequence-specific DNA binding and chromatin binding
RDX	Radixin	poly[A] RNA binding and cytoskeletal protein binding
<i>NFKBIA</i> [30,31]	NFKB Inhibitor Alpha	identical protein binding and transcription factor binding
HOXA7	Homeobox A7	transcription factor activity, sequence-specific DNA binding and transcription factor binding
HOXD8	Homeobox D8	transcription factor activity, sequence-specific DNA binding and RNA polymerase II regulatory region sequence-specific DNA binding
SPRR2C	Small Proline Rich Protein 2C	pseudogene
<i>S100A9</i> [32]	S100 Calcium Binding Protein A9	calcium ion binding and microtubule binding
KRT5	Keratin 5	structural molecule activity and scaffold protein binding
NTN4	Netrin 4	laminin-1 binding
LLGL1	Scribble Cell Polarity Complex Component	protein kinase binding and structural molecule activity

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