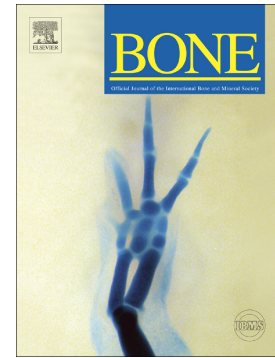


Accepted Manuscript

MicroRNA-155 induces autophagy in osteoclasts by targeting transforming growth factor β -activated kinase 1-binding protein 2 upon lipopolysaccharide stimulation

Ok-Joo Sul, You-Bin Sung, Monisha Rajasekaran, Ke Ke, Rina Yu, Sung-Hoon Back, Hye-Seon Choi



PII: S8756-3282(18)30319-3
DOI: doi:[10.1016/j.bone.2018.08.014](https://doi.org/10.1016/j.bone.2018.08.014)
Reference: BON 11731

To appear in: *Bone*

Received date: 7 April 2018
Revised date: 20 August 2018
Accepted date: 21 August 2018

Please cite this article as: Ok-Joo Sul, You-Bin Sung, Monisha Rajasekaran, Ke Ke, Rina Yu, Sung-Hoon Back, Hye-Seon Choi, MicroRNA-155 induces autophagy in osteoclasts by targeting transforming growth factor β -activated kinase 1-binding protein 2 upon lipopolysaccharide stimulation. *Bone* (2018), doi:[10.1016/j.bone.2018.08.014](https://doi.org/10.1016/j.bone.2018.08.014)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

MicroRNA-155 induces autophagy in osteoclasts by targeting transforming growth factor β -activated kinase 1-binding protein 2 upon lipopolysaccharide stimulation

Ok-Joo Sul¹, You-Bin Sung², Monisha Rajasekaran¹, Ke Ke¹⁺, Rina Yu², Sung-Hoon Back¹, and Hye-Seon Choi^{1*}

¹Department of Biological Sciences, University of Ulsan, Ulsan 680-749, Korea

²Department of Food Science and Nutrition, University of Ulsan, Ulsan 680-749, Korea

Running Title: Mir-155 in LPS-induced osteoclastogenesis

*Address correspondence and reprint requests to: Hye-Seon Choi, PhD, Department of Biological Sciences, University of Ulsan, Ulsan 680-749, Korea. TEL: +82-52-259-1545; FAX: +82-52-259-2740. E-mail: hschoi@mail.ulsan.ac.kr

+ Present address: Orthopedics and Cell Biology & Physiology, Washington University School of Medicine

Author Disclosure Statement: The authors have nothing to disclose.

Abbreviations: BMM, bone marrow-derived macrophages; M-CSF, macrophage-colony stimulating factor; miR, microRNA; miR-155, microRNA-155; MNC, multinucleated cells; OC, osteoclast; PBS, phosphate-buffered saline; qPCR, quantitative polymerase chain reaction; RANKL, receptor activator of nuclear factor kappa-B ligand; scRNA, scrambled siRNA; siRNA, small interfering RNA; TNF, tumor necrosis factor; TRAP, tartrate-resistant acid phosphatase; DC-STAMP, dendritic cell-specific transmembrane protein; ATP6v0d2, d2 isoform of vacuolar ATPase Vo domain; TAB2, Transforming growth factor β -activated kinase 1-binding protein 2; TAK1, transforming growth factor β -activated kinase 1; LPS, lipopolysaccharide; 3'UTR, three prime untranslated region; RHEB, Ras homolog enriched in brain; RICTOR, rapamycin-insensitive companion of mTOR; RPS6KB2, ribosomal protein S6 kinase β ; SHIP, SH2-containing 5'-inositol phosphatase; SOCS1, suppressor of cytokine signaling 1; MTF, microphthalmia-associated transcription factor; RPS, ribosomal proteins; AVO acidic vesicular organelles; AO, acridine orange; RNU6B, RNA U6B small nuclear; LC3, microtubule-associated protein light chain 3

Download English Version:

<https://daneshyari.com/en/article/9955230>

Download Persian Version:

<https://daneshyari.com/article/9955230>

[Daneshyari.com](https://daneshyari.com)