Dr. Domenico Coppola

Editor-in-Chief, Cancer cell international

July 14, 2020

Dear Dr. Domenico Coppola,

We would like to submit our manuscript entitled “**Long noncoding RNA ARHGAP5-AS1 inhibits migration of breast cancer cell via stabilizes SMAD7 protein**” to your journal ***Cancer cell internaional*** for your kind consideration.

As well known, long noncoding RNAs (lncRNAs) play important roles in cancer initiation and progression. Here we demonstrate for the first time that the lncRNA, ARHGAP5-AS1, was downregulated in MDA-MB-231-LM2 cells which is a highly aggressive subtype of MDA-MB-231. Moreover, ARHGAP5-AS1 could inhibit cell migration via suppression of stress fibers in breast cancer cells. Afterwards, SMAD7, one of the key inhibitors of TGFβ signaling, was further identified to interact with ARHGAP5-AS1 by its PY motif and thus its ubiquitination and degradation was blocked. Moreover, ARHGAP5-AS1 could inhibit TGFβ signaling pathway due to its inhibitory role on SMAD7. Overall, these findings highlight an important role for ARHGAP5-AS1 in the regulation of metastatic potential of breast cancer and suggest a potential application of ARHGAP5-AS1 in cancer treatment.

No conflict of interest exits in the submission of this manuscript, and manuscript is approved by all authors for publication. I would like to declare on behalf of my co-authors that the work described was original research that has not been published previously, and not under consideration for publication elsewhere, in whole or in part. All the authors listed have approved the manuscript that is enclosed.

We appreciate very much for your kind considerations.

Sincerely yours,

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