

## Retraction: *Lycium barbarum* polysaccharides inhibit proliferation and migration of bladder cancer cell lines BIU87 by suppressing Pi3K/AKT pathway

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**This article has been retracted:** Oncotarget has completed its investigation of this paper. It was determined that the article contains multiple instances of image duplication and overlap, both internal to the paper (Figure 2 b-actin is overlapping with b-actin in Figure 4), and external with other published works. Three earlier submitted publications [1–3] share a significant number of duplicated and overlapping images with this paper, where figures of reference [1] were almost completely reproduced in the Oncotarget paper:

Figure 1, panels A and B are duplicates of Figure 2A, 2B [1] and panels 1C and 1D replicates Figure 3A, 3B [1], where data for the control is removed;

Figure 2 is a duplicate of Figure 4A [1] where data for the control is removed;

Figure 3 panels A, B and C are the duplicates of Figure 5 [1] panels B, A, and C, respectively; Figure 4 panels A and B duplicated panels A and B of Figure 6A and 6B and panel 4C duplicated Figure 7A [1].

Additionally, Figures 3B and 4B are duplicates of Figures 4F and 5F of [2] and Figure 4C b-actin is a duplicate of Figure 2B b-actin of [3] which also was found in Figure 6A of [4].

We also found that some images were duplicated in the later published papers, some of which are already retracted. Specifically, western blot for MMP-2 in Figure 1D was found as Bcl2 blot in Figure 7H of [5]; transwell assay images from Figures 3B and 4B were found in Figures 1B and 7D of [6], 3I, 5F and 6H of [7].

Authors were contacted and they informed us that the original data was lost. Taking into account all found inconsistencies, the Editorial decision has been made to retract this article. The authors were informed of this decision.

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## REFERENCES

1. Guan Z, Shen L, Liang H, Yu H, Hei B, Meng X, Yang L. Resveratrol inhibits hypoxia-induced proliferation and migration of pulmonary artery vascular smooth muscle cells by inhibiting the phosphoinositide 3-kinase/protein kinase B signaling pathway. *Mol Med Rep.* 2017; 16:1653–60. <https://doi.org/10.3892/mmr.2017.6814>. [PubMed]
2. Zhou CL, Li JJ, Ji P. Propofol Suppresses Esophageal Squamous Cell Carcinoma Cell Migration and Invasion by Down-Regulation of Sex-Determining Region Y-box 4 (SOX4). *Med Sci Monit.* 2017; 23:419–27. <https://doi.org/10.12659/msm.899732>. [PubMed]
3. Yu J, Wang X, Li Y, Tang B. Tanshinone IIA suppresses gastric cancer cell proliferation and migration by downregulation of FOXM1. *Oncol Rep.* 2017; 37:1394–400. <https://doi.org/10.3892/or.2017.5408>. [PubMed]
4. Liu YJ, Li W, Chang F, Liu JN, Lin JX, Chen DX. MicroRNA-505 is downregulated in human osteosarcoma and regulates cell proliferation, migration and invasion. *Oncol Rep.* 2018; 39:491–500. <https://doi.org/10.3892/or.2017.6142>. [PubMed]. Retraction in: *Oncol Rep.* 2023; 50:145. <https://doi.org/10.3892/or.2023.8582>. [PubMed]
5. Kang M, Ren M, Li Y, Fu Y, Deng M, Li C. Exosome-mediated transfer of lncRNA PART1 induces gefitinib resistance in esophageal squamous cell carcinoma via functioning as a competing endogenous RNA. *J Exp Clin Cancer Res.* 2018; 37:171. <https://doi.org/10.1186/s13046-018-0845-9>. [PubMed]. Retraction in: *J Exp Clin Cancer Res.* 2023; 42:82. <https://doi.org/10.1186/s13046-023-02648-7>. [PubMed]

6. Liu T, Zhang J, Chai Z, Wang G, Cui N, Zhou B. Ginkgo biloba extract EGb 761-induced upregulation of LincRNA-p21 inhibits colorectal cancer metastasis by associating with EZH2. *Oncotarget*. 2017; 8:91614–27. <https://doi.org/10.18632/oncotarget.21345>. [PubMed]. Retraction in: *Oncotarget*. 2025; 16:310. <https://doi.org/10.18632/oncotarget.28525>. [PubMed]
7. Zhou X, Natino D, Qin Z, Wang D, Tian Z, Cai X, Wang B, He X. Identification and functional characterization of circRNA-0008717 as an oncogene in osteosarcoma through sponging miR-203. *Oncotarget*. 2017; 9:22288–300. <https://doi.org/10.18632/oncotarget.23466>. [PubMed]