

## Retraction

**Retraction: Selenium-enriched polysaccharides from *Pyracantha fortuneana* (Se-PFPs) inhibit the growth and invasive potential of ovarian cancer cells through inhibiting  $\beta$ -catenin signaling**

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**This article has been retracted:** This decision was made following an investigation by Oncotarget into concerns raised by readers and a subsequent request from the corresponding author. Our investigation identified multiple instances of internal and external duplications, overlaps, and reuse of Western Blot (WB) images. These include:

Internal Duplications:

Figure 1D: WB bands for PARP in HEY cells and SKOV3 cells overlap.

Figure 2B: WB bands for beta-actin in SKOV3 cells overlap with the beta-actin bands in HEY cells in Figure 5B.

Figure 3D: WB of beta-actin in SKOV3 cells was reused in Figures 6C and 6D, illustrating different treatments.

Figure 5A: WB bands for beta-catenin in SKOV3 cells overlap with HEY beta-catenin bands in Figure 5F.

Figure 5A: WB bands for Cyclin D1 in SKOV3 cells overlap with SKOV3 E-cadherin bands in Figure 6C.

Figure 5A: WB for Cyclin D1 in SKOV3 cells is the same as the HEY vimentin blot in Figure 6D.

Figure 5B: Beta-actin WB and Figure 5D beta-catenin WB in SKOV3 cells are the same.

Reuse of Images in a 2017 article [1]:

Figure 3D: Beta-actin image for SKOV3 cells was reused in Figure 5F [1].

Figure 5C: Beta-catenin image was found to overlap with the Caspase 1 image in Figure 4B [1].

Figure 5C: WB for GSK 3 beta was reused in Figure 5F as Caspase 1 WB [1].

Figure 6C: HEY cells' beta-actin image is overlapping with the beta-actin image in Figure 4B [1].

Supplementary Figure 2B: WB bands of beta-catenin overlap with beta-actin bands in Figure 4B [1].

External Duplication:

The beta-actin bands in Figure 3D overlap with WB bands in Figure 4E in an unrelated paper [2].

Given these findings, the editorial decision has been made to retract the paper. Although the authors initially sent a retraction agreement letter, they did not confirm their agreement with the retraction text.

Original article: Oncotarget. 2016; 7:28369–28383. <https://doi.org/10.18632/oncotarget.8619>

## REFERENCES

1. Yuan C, Liu C, Wang T, He Y, Zhou Z, Dun Y, Zhao H, Ren D, Wang J, Zhang C, Yuan D. Chikusetsu saponin IVa ameliorates high fat diet-induced inflammation in adipose tissue of mice through inhibition of NLRP3 inflammasome activation and NF- $\kappa$ B signaling.

Oncotarget. 2017; 8:31023–40. <https://doi.org/10.18632/oncotarget.16052>. [PubMed]. Retraction in: Oncotarget. 2025; 16:814. <https://doi.org/10.18632/oncotarget.28781>. [PubMed]

2. Gao Y, Yuan D, Gai L, Wu X, Shi Y, He Y, Liu C, Zhang C, Zhou G, Yuan C. Saponins from *Panax japonicus* ameliorate age-related renal fibrosis by inhibition of inflammation mediated by NF-κB and TGF-β1/Smad signaling and suppression of oxidative stress via activation of Nrf2-ARE signaling. *J Ginseng Res.* 2021; 45:408–19. <https://doi.org/10.1016/j.jgr.2020.08.005>. [PubMed]