



# Corrigendum: Role of HK2 in the Enzootic Cycle of *Borrelia burgdorferi*

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## A Corrigendum on

Role of HK2 in the Enzootic Cycle of Borrelia burgdorferi

by Liu, Q., Xu, H., Zhang, Y., Yang, J., Du, J., Zhou, Y., et al. (2020). Front. Med. 7:573648. doi: 10.3389/fmed.2020.573648

In the original article, there was a mistake in **Figure 5** as published. Due to an error in compiling multi-panel images, a gap between the image of "B31A3" and the image of "B31A3/flaBp-HD-GYP; B31A3/flaBp-hk2" was omitted. In this figure, unphosphorylated Rrp2 (lower lane) serves as an internal control for each sample. Overproduction of an unrelated protein HD-GYP (B31A3/flaBp-HD-GYP) serves as the negative control for overproduction of Hk2 (B31A3/flaBp-hk2), showing a reduction of Rrp2 phosphorylation by overexpression of Hk2. The corrected **Figure 5** appears below.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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1



**FIGURE 5** Overexpressing HK2 reduces the level of phosphorylated Rrp2 in *B. burgdorferi*. Phos-tag SDS-PAGE and immunoblotting was used to detect both phosphorylated and dephosphorylated Rrp2 in the cell. Wild-type *B. burgdorferi* B31A3, B31A3 carrying a shuttle vector harboring a unrelated protein HD-GYP (B31A3/flaBp-HD-GYP), or B31A3 carrying a shuttle vector harboring a *hk2* gene driven by a *flaB* promoter GYP (B31A3/flaBp-hk2), were harvested at mid-log phase and cell lysates were prepared and separated on 7.5% SDS-PAGE containing 0, 5, 10, and 25 uM Phos-tag followed by immunoblotting using anti-Rrp2 antibody. p-Rrp2, the band corresponds to phosphorylated Rrp2. As a unphosphorylated Rrp2 control, B31A3 was also treated by boiling (lane 2) prior to Phos-tag SDS-PAGE (Rrp2 phosphorylation is unstable and sensitive to heat).