

Peroxisome reintroduction in *Hansenula polymorpha* requires Pex25 and Rho1

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The editors of *The Journal of Cell Biology* have been notified by Dr. Ida J. van der Klei that she and the other authors of the paper referenced above retract the paper. As a result of this retraction, no data in this paper should be cited in the scientific literature.

The authors provided the following statement:

Figs. 4 D and 5 C

The experiment shown in Fig. 4 D presents fluorescence microscopy analysis of a *Hansenula polymorpha pex3 pex25* strain that produces Pex3-GFP under control of the inducible amine oxidase promoter (*pex3 pex25* P_{AMO}PEX3-GFP). The results indicate that peroxisomes are not formed upon induction of Pex3-GFP synthesis. In this strain, indeed, PEX25 is deleted and P_{AMO}PEX3-GFP is properly introduced. However, it appeared that P_{AMO}PEX3-GFP was introduced in a *pex11 pex25* strain (also used in this project), instead of a *pex3 pex25* strain, explaining why peroxisomes were not formed.

For the experiment shown in Fig. 5 C, a *pex3 pex25* P_{AOX}BIP_{N30}PEX3-mCherry strain was constructed. The P_{AOX}BIP_{N30}PEX3-mCherry construct was introduced in the same, wrong, stock of *pex3 pex25* competent cells (used for the strain of Fig. 4 D), which were *pex11 pex25* cells. This mistake explains why induction of BIP_{N30}Pex3-mCherry synthesis did not lead to peroxisome formation.

We have constructed a new *pex3 pex25* P_{AMO}PEX3-GFP strain and repeated the experiment of Fig. 4 D. The outcome of the experiment was that peroxisomes were formed upon induction of Pex3-GFP synthesis (like in the control strain shown in Fig. 4 A).

Fig. 6, D–F

In the fluorescence microscopy images shown in Fig. 6 (D–F), P_{AOX}PEX11-mCherry was introduced in *pex11 pex25* cells. Induction of Pex11-mCherry synthesis did not result in peroxisome formation. The strain used was indeed a *pex11 pex25* double deletion strain. However, the mCherry fusion protein that was introduced appeared not to be correct. We made a new strain and repeated the experiment of Fig. 6 F. This experiment revealed that upon induction of Pex11-mCherry synthesis peroxisomes were formed. Hence, the conclusion that Pex25 is required for the formation of peroxisomes in *H. polymorpha pex11 pex25* cells is not correct.

The authors apologize for any confusion these errors may have caused to the research community.