

# Review of: "Metadichol Induces CD14 Glycoprotein Expression in Human Embryonic Stem Cells and Fibroblasts"

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Potential competing interests: No potential competing interests to declare.

The study titled "Metadichol Induces CD14 Glycoprotein Expression in Human Embryonic Stem Cells and Fibroblasts" addresses an interesting and relevant topic. The manuscript is generally well-organized, which is appreciated. However, before it can be considered for publication, the authors must address several key points. Please review the comments below carefully. I trust that these issues will be addressed thoroughly.

1. **Keywords:** Keywords are missing and should be added at the end of the abstract.
2. **Rationale for Metadichol:** The rationale for using Metadichol needs to be further elaborated.
3. **Metadichol Concentration:** How did the authors determine the concentration of Metadichol used in the experiments? Please provide a detailed explanation of the protocol.
4. **Stem Cell Identification:** What is the code number for the human embryonic stem cells used in this study?
5. **Culture Medium:** The term "suitable media for human embryonic stem cell culture" is too vague. Please specify the exact name of the media used.
6. **Figure 1:** The caption for Figure 1 is too brief. It should be expanded to provide more detail. Additionally, the figure should be divided into Panel A and Panel B. Did the authors perform statistical analysis? If so, the significance levels between groups should be indicated.
7. **Figure 2:** Similar to Figure 1, the caption for Figure 2 is too brief. It should include more explanation, and the figure should be divided into Panel A, B, and C. Please also indicate if statistical analysis was performed and show the significance levels between groups.
8. **Figure 3:** The caption for Figure 3 needs to be expanded as well, with the figure divided into Panel A and B. Statistical analysis should be reported, along with the significance levels between groups.
9. **Cytotoxicity:** The cytotoxicity of Metadichol should be evaluated using both MTS assays and live/dead staining.
10. **References:** The authors should include more up-to-date and relevant references.

Finally, I recommend that the authors carefully proofread the manuscript to correct minor typographical errors and enhance overall clarity. The manuscript requires significant revisions before it can meet the journal's standards.