

A call to standardize teratoma assays used to define human pluripotent cell lines.

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Public Summary:

This is an "exposé" of the gold standard for proving pluripotency in human stem cells, the teratoma assay. We found that this animal-based assay was unevenly applied in stem cell research; with no standards to guide this technique, we argue that the field needs a new, more reliable way to prove that human cells are pluripotent.

Scientific Abstract:

The teratoma assay is the gold standard for documenting pluripotency of human stem cells. However, reports of new human ESC and iPSC lines vary widely in both methods and analysis of teratoma data. We call for consensus standards to be established to make this assay worthy of its "golden" status.

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