

What is considered a stem cell vs primary cell vs cell line?

Last Modified on 03/02/2022 3:17 pm EST

Primary cells are taken from living tissues, stem cells are a subset of primary cells, and cell lines are immortalized products

As part of **Cell Products** we've created [seven subcategories](#) to encompass the variety of product types that are part of our database. At first glance, three subcategories, in particular, may appear similar: primary cells, stem cells, and cell lines. Here's what each of these mean:

Primary cells: The cells are taken directly from living tissue. They best represent cells as they exist in the body in terms of expression, morphology, and metabolism and are well-suited to experiments that interrogate those *in vivo* processes or for drug development, for example. However, they have a finite lifespan, a limited capacity for expansion, they are relatively expensive and sometimes in limited supply (particularly primary cells from patients).

Stem cells: Stem cells can be considered a subset of primary cells. They have the capacity to differentiate into a variety of cells and are a valuable research tool for investigating things like tissue/organ replacement or stem cell therapy.

Cell lines: These tend to be cells that have been immortalized, so they do not suffer from the same finite lifespan as

We use cookies on our website to make your browsing experience better. By using the site, you agree to use our cookies. [Learn more](#)

Accept