

撰寫科學文章：如何選擇正確用字

Word usage in scientific writing

English is the language of choice for many international scholarly journals. It is almost no choice but to publish in English in order to obtain international recognition.

**It is important to use words
properly**

Scientific English is an international language. Slang and informal writing should be avoided.

Give a talk vs. Make a speech

A talk gives the idea of an informal discourse.

A speech describes a formal occasion.

Loading vs. Load

Loading is the action of the verb to load

Load is a burden; a weight to be carried .

Summary vs. Conclusion

Concentration

vs.

Dose

TB dose-dependently increased the thymidine incorporation in HUVEC.

TB concentration-dependently increased the thymidine incorporation in HUVEC.

TB dose-dependently increased the incidence of cure.

Induce

FA induces GH expression

FA increases GH expression

**FA induces an increase of
GH expression**

Improve
vs.
Increase

NE improves blood pressure

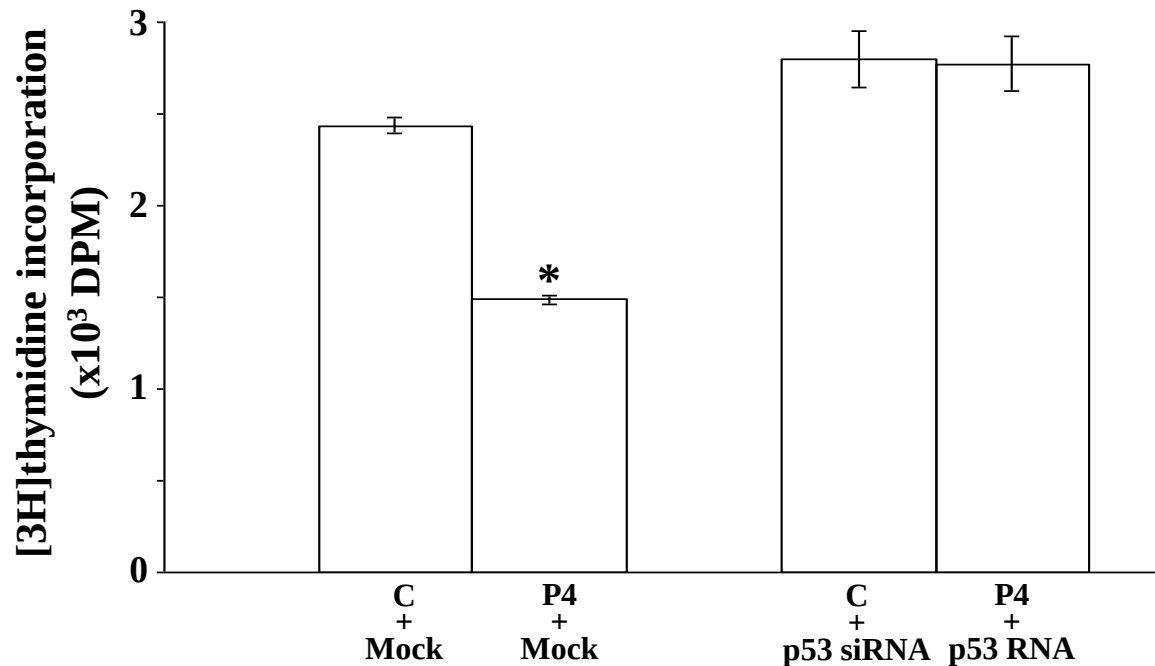
NE increases blood pressure

Reverse

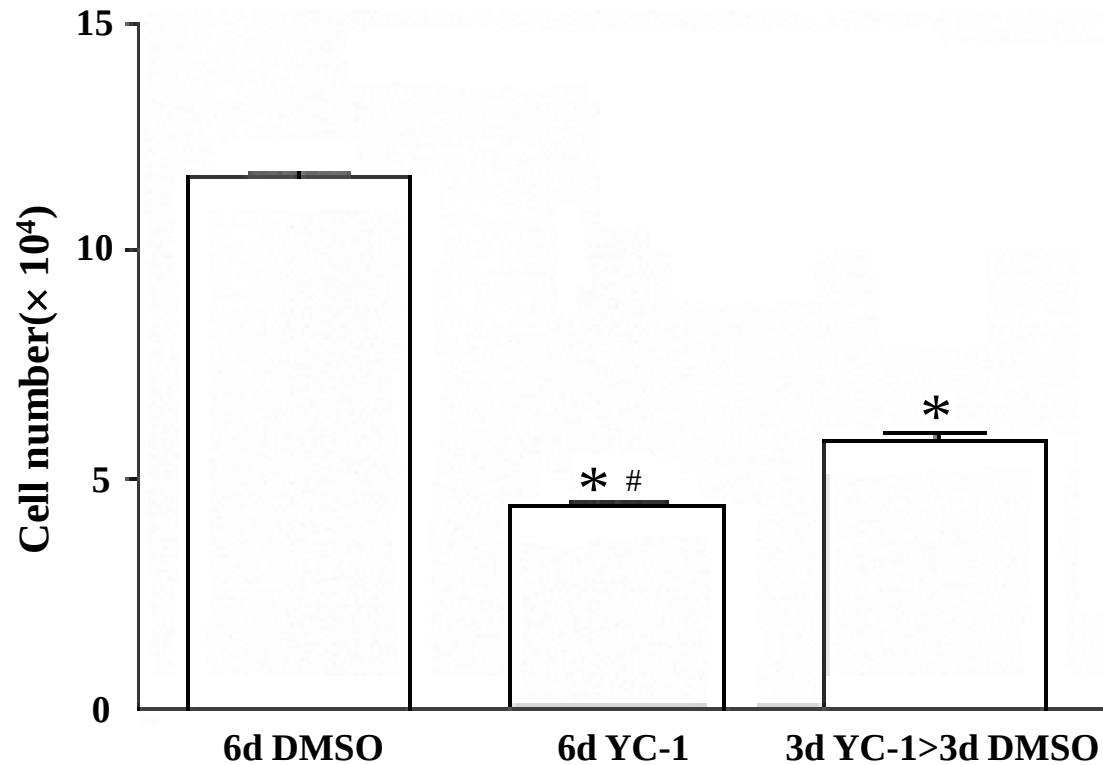
vs.

Prevent

Transfection of HUVEC with p53 siRNA **prevents** the progesterone-induced decrease of thymidine



YC-1-induced inhibition of HUVEC proliferation is **reversed** by removal of YC-1



Indicate vs. Imply

Crying and screaming () you are unhappy here.

Your behavior () you are unhappy here.

Indicate vs. Imply

Crying and screaming **(indicates)** you are unhappy here.

Your behavior **(implies)** you are unhappy here.

Indicate vs. Suggest

The presence of progesterone receptor in the medial layer of the aorta () that they are expressed by human aortic smooth muscle cells.

The results from the immunocytochemical staining () that progesterone receptors are expressed by human aortic smooth muscle cells.

Indicate vs. Suggest

The presence of progesterone receptor in the medial layer of the aorta **(suggests)** that they are expressed by human aortic smooth muscle cells.

The results from the immunocytochemical staining **(indicates)** that progesterone receptors are expressed by human aortic smooth muscle cells.

Inactive vs. Deactivate

“Inactive (adj)” is a state of being. It is preferable not to use the verb “inactivate” or “inactivated.”

“Deactivated (verb)” is the result of an action. To deactivate (verb) something, it must first have been activated.

Activation vs. Upregulation

In biochemistry, “activation” is where enzymes or other biologically active molecules acquire the ability to perform their biological function.

"Upregulation" refers to a gene-regulation as a response to a stimulus.

Overexpression vs. Upregulation

"Overexpression" is an experimentally induced expression at higher levels than "normal", usually by transfection of the cell.

"Upregulation" refers to a gene-regulation as a response to a stimulus.

Increased expression

vs.

Increased the protein level

Growth vs. Proliferation

“Growth”---increase in mass.

“Cell proliferation”---increase in cell number.

Generation vs. Passage

When the cells have doubled once then it is one generation.

The passage number simply refers to the number of times the cells in the culture have been subcultured.

Data vs. Results

Data are your number.

Results are your interpretation of the data.

Finding vs. Observation

“Findings” are more rigorous and have been appropriately tested using tightly controlled variables.

"Observations" are just that, observations made by the researchers that have not been as rigorously.

Is responsible for

vs.

Contribute

I was responsible for this project.

I contributed to this project.

Difference vs. Discrepancy

In vitro perfusion studies of rabbit proximal tubules indicated the existence of SGLT1 located in S3 segments. Immunofluorescence studies using an antibody against rabbit SGLT1, however, localized this protein to the brush border membranes of all three proximal tubule segments (S1, S2, and S3) of rat kidney. A possible explanation for this **discrepancy** is the expression in the kidney of several proteins similar to SGLT1, making the specificity of anti-SGLT1 antibodies uncertain.

Different
vs.
Various

Various means there are multiple kinds of something. **Different** means 2 or more things that are not the same.

Difference

vs.

Significant difference

Significantly
vs.
Dramatically

**Intermittent hypoxia dramatically
increased the ROS level**

**Intermittent hypoxia significantly
increased the ROS level**

Percent
vs.
Percentage

The word percent (or the symbol %) is one part of a hundred, whereas percentage is a part of a whole and used without a number.

More than 50 percent of people like this lecture.

A low percentage of people are bored by this lecture.

Divide
vs.
Separate

**The animals were divided
into four groups.**

**She tried to separate the two
men who were fighting.”**

**The molecular background of these lesions
is unknown.**

**The molecular background of these lesions
is still not clear (not well known).**

The thyroid hormone was not expressed in the kidney.

The expression of thyroid hormone was not detected in the kidney.

Previous studies have shown that progesterone inhibits proliferation of endothelial cells through a nuclear receptor-mediated mechanism in rat aortic endothelial cells. Here, we **further** demonstrate that progesterone inhibited DNA synthesis in cultured human umbilical vein endothelial cells.

Previous studies have shown that progesterone inhibits proliferation of endothelial cells through a nuclear receptor-mediated mechanism in rat aortic endothelial cells. Here, we demonstrate that progesterone inhibited DNA synthesis in cultured human umbilical vein endothelial cells.

General remarks on writing a paper

- be consistent (also in tense, ...)
- use active form (simpler, easier, stronger)
- never use contractions (e.g., it's, can't, ...)
- all images, figures, tables, ... must be labelled and referenced in the text
- all images, figures, tables, ... must have a caption describing what they are there for
- no paragraph should have only one sentence
- use a spellchecker
- the word data is plural
- use simple formulations and short sentences, if a sentence can be broken into two, do it.
- try to avoid abbreviations (except: i.e., e.g.), if more convenient, introduce in Introduction

General rule for the sentences used

- **Present sentence : Title or subtitle 、 accepted findings 、 Figure and Table shows**
- **Past sentence : the present research findings**

Tips for scientific writing

**Read more and
write more**

Practice makes better