

Word for Word

Using Greek Letters in Scientific Text

Greek letters are common in scientific terminology and mathematical notation. However, writers sometimes do not know whether they should be represented using letters or words (e.g., α versus alpha) or how to create those letters using word-processing software.

According to the *AMA Manual of Style*, Greek letters—not words—should be used in almost all cases.

Examples

We treated leukemia cells with 1 μM Ara-C for 24 or 48 hours.

Curcumin is an inhibitor of the transcription factor nuclear factor- κB .

Exposing cells to $\text{TNF}\alpha$ stimuli activates $\text{IKK}\beta$; in turn, this triggers $\text{I}\kappa\text{B}\alpha$ degradation and enhances $\text{NF-}\kappa\text{B}$.



Exceptions to this rule include electroencephalographic terminology (e.g., lambda or alpha waves) and some non-proprietary drugs, such as beta carotene (although the Greek letter is still used for beta carotene's chemical name [β -carotene]). If you are not sure whether to use a Greek letter, consult a medical dictionary.

A Greek letter should never be capitalized, even at the start of a sentence or as part of a title, unless it is normally capitalized in the term in which it is used. If an uncapitalized Greek letter is used at the beginning of a sentence or in a title, capitalize the first letter after the Greek letter.

Example

β -Actin and poly(ADP-ribose) polymerase were used as the controls.

In Microsoft Word, Greek letters should always be created using inserted symbols. To insert symbols, go to the “Insert” tab. If using a PC, choose “Symbol” and select “More Symbols”; if using a Mac, choose “Advanced Symbol” and then “Symbols.” Ensure that the font is listed as “normal text” (not Symbol or Wingdings). Inserting Greek letters this way will ensure that the letters are retained if the font is changed throughout the document.

Do not insert Greek letters by using Word’s Equation Editor or by importing them from MathType or LaTeX unless they are not available in the symbol menu or you are already importing text from these programs. To save time when inserting letters you use often, use shortcut keys or the autocorrect function in Word. For more information on inserting Greek letters or special characters, see the [Summer 2019 issue](#) of *The Write Stuff*.

When inserting symbols, be careful not to use a German ß (Eszett or scharfes S) in place of a Greek β. In addition, do not use the letter *u* to represent μ or use graphics in place of Greek letters or other symbols.

Always check the author instructions of the journal before submitting your manuscript, as some journals have preferences regarding the use or format of Greek letters.

Bibliography

American Medical Association. *AMA Manual of Style: A Guide for Authors and Editors*. 10th ed. Iverson C, et al, eds. New York: Oxford University Press, 2007: 781-782.

Suzanne S. Barnhill. Inserting special characters. <http://wordfaqs.ssbarnhill.com/InsertSpecChars.htm>. Accessed December 6, 2019.

—Ann Sutton

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