

CRISPR 2.0 'base editing' arrives and it's an even more remarkable disease-fighting tool

You've probably heard of the molecular scalpel CRISPR-Cas9, which can edit or delete whole genes. Now, scientists have developed a more precise version of the DNA-editing tool that can repair even smaller segments of a person's genome. In two studies published [Oct 25], [one in Nature](#) and [another in Science](#), researchers from the Broad Institute of MIT and Harvard describe a new way to edit DNA and RNA, called base editing.

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The human genome contains six billion DNA letters, or chemical bases known as A, C, G and T. ... Base editing, which uses a modified version of CRISPR, is able to change a single one of these letters at a time without making breaks to DNA's structure.

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Ross Wilson, of the Innovative Genomics Institute at the University of California, Berkeley, says base editing may eventually be a better way to treat some diseases. He says a single base pair is like a word in a paragraph of text. With conventional CRISPR technology, you would have to replace the whole paragraph.

"It's a lot of DNA to move around," he says. With base editing, you could just change the single word.

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The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [CRISPR 2.0 Is Here, and It's Way More Precise](#)