

Why some researchers have urged caution with CRISPR gene editing

Despite all the excitement surrounding CRISPR editing, researchers have urged caution about moving too fast. Two recent studies have raised concerns that CRISPR may not be as effective as previously thought, and in some cases it may produce unwanted side effects.

The [first study](#) showed that when the Cas9 protein — part of the CRISPR system that snips the DNA before correcting the mutation — cuts the DNA of stem cells, it causes them to become stressed and stops them from being edited. While some cells can recover after their DNA has been corrected, other cells could die.

The [second study](#) showed that a protein called p53, which is well known for guarding against tumors, is activated by cellular stress. The protein then inhibits CRISPR from editing. Since CRISPR activity causes stress, the editing process may be thwarted before it even accomplishes its task.

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Additionally, like most technologies, not all editing is accurate. Occasionally, CRISPR targets the wrong sites in the DNA and makes changes that researchers fear could cause disease.

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Looking forward, it is obvious that the technology has great potential to treat human diseases. The recent studies have revealed new aspects of how CRISPR works that may have implications for the ways in which these therapies are developed.

Read full, original post: [Here's what we know about CRISPR safety – and reports of 'genome vandalism'](#)