

CRISPR update calms fears about off-target editing effects

The fear that CRISPR-based genome repair for preventing or treating genetic diseases will be derailed by “editing gone wild” has begun to abate, scientists who are developing the technique say.

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A [study](#) last year involving just three mice raised fears that CRISPR-Cas9, the classic version of the genome editor, might be a big, stupid bloodhound. Scientists at Stanford University reported they found hundreds of off-target effects, which they said was “of concern”: Messing with a tumor-suppressor gene could cause cancer, while other edits “could be detrimental to key cellular processes,” they wrote.

The stock prices of several CRISPR companies swooned, but CRISPR experts immediately pounced. In addition to using so few mice, the study, they said, didn’t account for the fact that DNA differences between the two CRISPR’d mice and the control mouse might simply have reflected different ancestry.

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Scientists led by Dr. Keith Joung of Massachusetts General Hospital, however, have discovered a way to drastically minimize that bystander effect. According to an unpublished [paper](#)...they tweaked the base editor to, in essence, change that C only if the letter before it is, say, a T. It’s akin to priming the bloodhound to find suspects wearing Nikes only if the aroma of Dockers is also around.

Read full, original post: [CRISPR ‘gone wild’ has made stocks swoon, but studies show how to limit off-target editing](#)