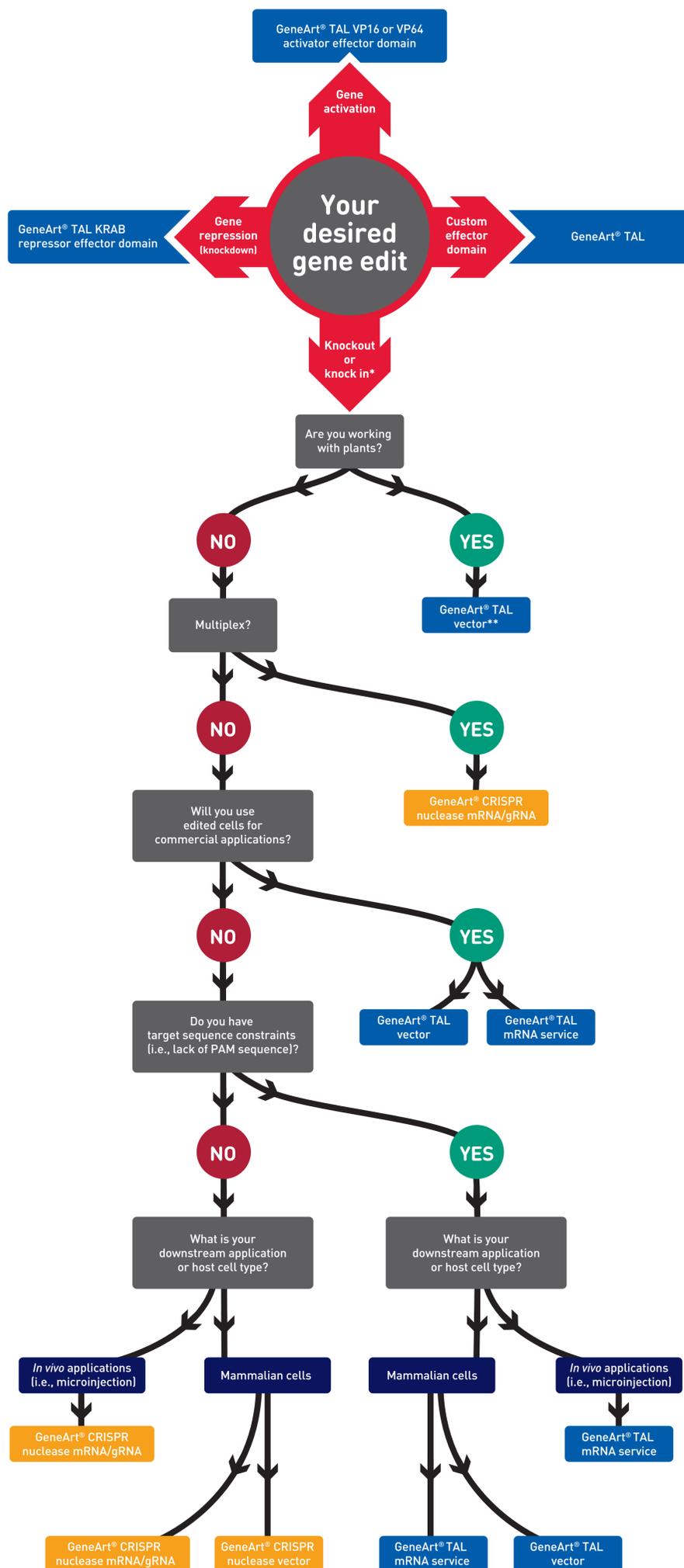


# Genome editing selection guide

Find the right genome editing technology for your application

With so many genomic tools and technologies available, trying to decide which ones to use for your research can be overwhelming. That's why we've simplified the process. Here's our handy selection guide, designed to help you determine which technologies are ideal for you based on your specific research needs.

Whether you want to design the optimal TAL effector pair or CRISPR-Cas9 gRNA, select the optimal transfection reagent, or simply place your order, our experts can help. Go to [lifetechnologies.com/genomeedit](http://lifetechnologies.com/genomeedit) to get started.



## GeneArt® TAL effector tools

Precise and flexible editing with the freedom to innovate

TAL effectors are a widely used technology for precise and efficient gene editing in live cells. The deciphering of the TAL effector "code" led to the engineering of designer TAL effector proteins. We've recently secured rights to certain intellectual properties (e.g., patented methods) around TALs, clarifying a path for you to move confidently forward and innovate.\* GeneArt® TALs provide custom DNA binding proteins engineered and designed for accurate DNA targeting and precise genome editing. GeneArt® TALs offer site-specific delivery of nucleases, activators, repressors, chromatin modifiers, genomic labels, and cross-linking molecules. This genome editing technology is known to function in a variety of host systems, including bacteria, yeast, plants, insects, fish, and mammals.



## GeneArt® CRISPR-Cas9 tools

Rapid and efficient editing with multiplexing capabilities

With their highly flexible but specific targeting, CRISPR-Cas9 systems can be manipulated and redirected to become powerful tools for genome editing. CRISPR-Cas9 technology permits targeted gene cleavage and gene editing in a variety of cells—and because the endonuclease cleavage specificity in CRISPR-Cas9 systems is guided by RNA sequences, editing can be directed to virtually any genomic locus by engineering the guide RNA sequence and delivering it along with the Cas9 endonuclease to your target cell. Based on your research needs, you can choose from our two different formats of CRISPR tools: CRISPR-Cas9 all-in-one expression vectors, or CRISPR-Cas9 mRNA and gRNA.

### Ordering information

CRISPR-Cas9 all-in-one vector	Cat. No.
GeneArt® CRISPR Nuclease Vector: OFP Reporter	A21174
GeneArt® CRISPR Nuclease Vector: OFP Reporter with Competent Cells (Combo)	A21178
GeneArt® CRISPR Nuclease Vector: CD4 Enrichment	A21175
GeneArt® CRISPR Nuclease Vector: CD4 Enrichment with Competent Cells (Combo)	A21177
CRISPR-Cas9 mRNA	
GeneArt® CRISPR Nuclease mRNA	A25640
GeneArt® Strings™ U6 DNA	Contact <a href="mailto:geneartsupport@lifetech.com">geneartsupport@lifetech.com</a>
GeneArt® Strings™ T7 DNA	Contact <a href="mailto:geneartsupport@lifetech.com">geneartsupport@lifetech.com</a>
Custom <i>in vitro</i> transcribed gRNA	Contact <a href="mailto:custom.services@lifetech.com">custom.services@lifetech.com</a>
TAL effectors	
GeneArt® TALs	Contact <a href="mailto:geneartsupport@lifetech.com">geneartsupport@lifetech.com</a>
Detection and analysis tools	
GeneArt® Genomic Cleavage Detection Kit	A24372
GeneArt® Genomic Cleavage Selection Kit	A27663
Additional related products	
Lipofectamine® MessengerMAX™ Transfection Reagent	LMRNA003
Lipofectamine® 2000 Transfection Reagent	11668019
Lipofectamine® 3000 Transfection Reagent	L3000015
MEGAscript™ T7 Transcription Kit	AM1354
MEGAclean™ Transcription Clean-Up Kit	AM1908

\*Thermo Fisher Scientific is currently the only provider of TAL technology that includes rights under the foundational TAL IP invented at Martin-Luther-Universität Halle-Wittenberg, the University of Minnesota, and Iowa State University. For information on Thermo Fisher's right to sell TAL technology, please see our press release dated June 5, 2014. For further information on licensing for TAL technology, please contact us at [outlicensing@lifetech.com](mailto:outlicensing@lifetech.com)

\*\*When using plant vectors with the right promoter, the CRISPR system may be used for plant genome editing.

Find out more at [lifetechnologies.com/genomeedit](http://lifetechnologies.com/genomeedit)



A Thermo Fisher Scientific Brand