hfCas12Max Nuclease

Product Overview

Synthego's hfCas12Max nuclease* is engineered to advance the next generation of CRISPR-based therapeutics. Synthego has partnered with HuidaGene Therapeutics™ to introduce a high-fidelity novel nuclease—hfCas12Max—and its' high-quality gRNA. Characterized by a broad PAM sequence recognition and its' small size, hfCas12Max is an exceptional nuclease for your CRISPR-based therapeutic.

**hfCas12Max nuclease purchased from Synthego is only intended and licensed to be used solely with hfCas12Max guide RNAs purchased from Synthego, and hfCas12Max guide RNAs purchased from Synthego are only intended and licensed to be used solely with hfCas12Max nuclease purchased from Synthego. Inquire more about further terms, conditions, and application use.*

- Unmatched high fidelity.
- Broad PAM sequence recognition.
- Small size.

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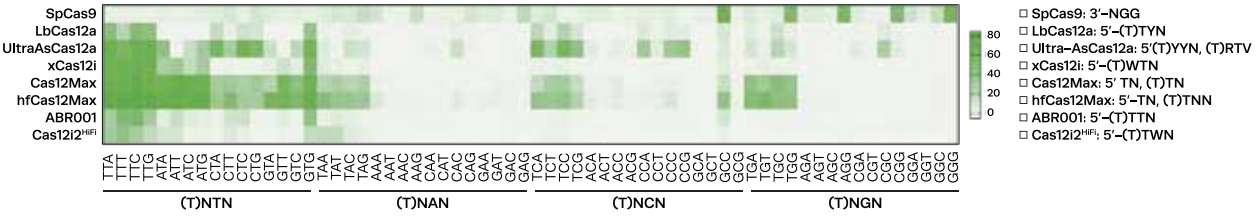
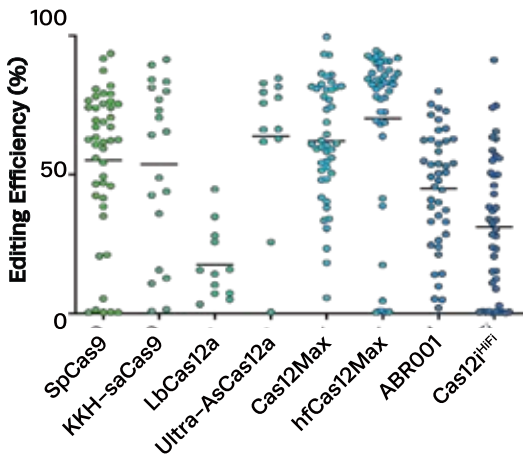
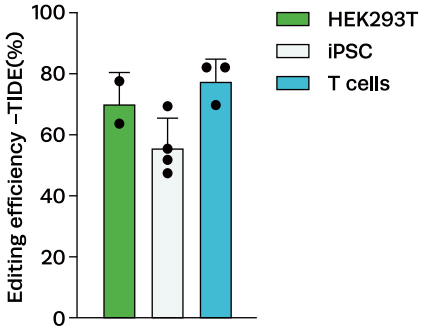
Broad PAM Sequence Recognition Expands Gene Editing Capabilities



Comparative analysis of PAM sequence recognition between hfCas12Max nuclease and other common Cas nucleases reveals that hfCas12Max nuclease exhibits an expanded PAM recognition profile.

Superior CRISPR Gene Editing





Editing efficiency assessment between common Cas nucleases revealed that hfCas12Max nuclease meets the demand for alternative nucleases with superb editing efficiencies (Left).

Examining hfCas12Max nuclease editing efficiency across multiple cell types, specifically targeting the TRAC gene. The results demonstrate that hfCas12Max achieved an average editing efficiency of 60% across various cell types (Right).

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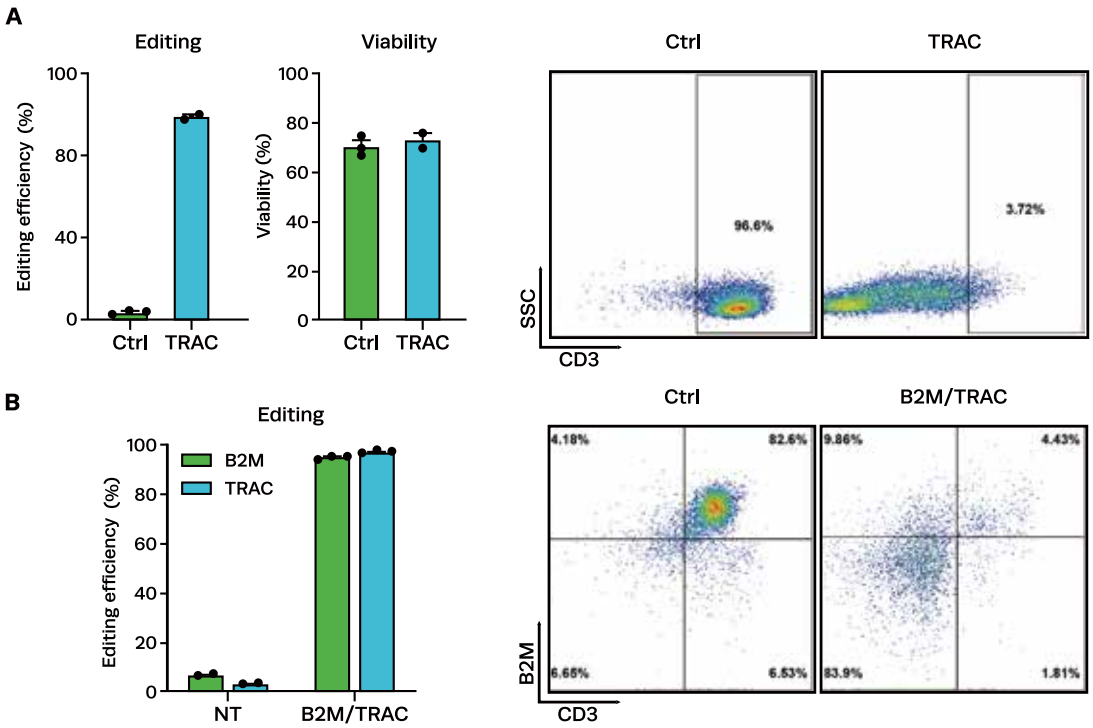
High Editing Efficiency



Using hfCas12Max Nuclease, a single knockout of TRAC (A) and a double knockout of B2M and TRAC (B) were achieved in primary T cells. Editing efficiency was evaluated using Sanger sequencing, while TRAC protein expression was analyzed through flow cytometry.

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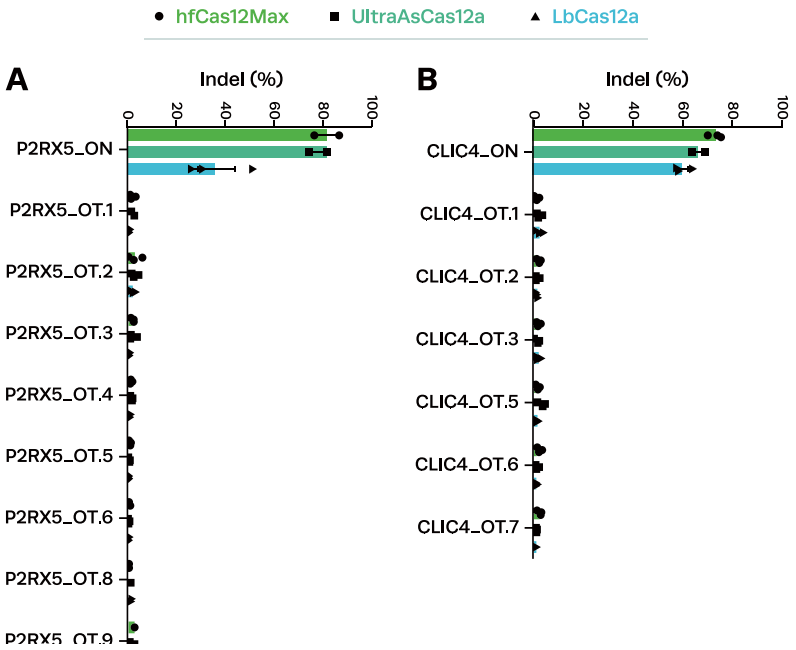
Minimal Off–Target Editing



On-target (ON) and off-target (OF) analysis comparison of hfCas12Max, UltraAsCas12a, and LbCas12a targeting P2RX5 loci (A) and CLIC4 loci (B). NGS verification of *in silico* off-target sites. hfCas12Max demonstrates minimal off targets when compared to other Cas12 nucleases.

輸入販売元

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