

Resource Summary Report

Generated by [NIF](#) on Sep 10, 2026

pKS diaCas9_sgRNA

RRID:Addgene_74923

Type: Plasmid

Proper Citation

RRID:Addgene_74923

Plasmid Information

URL: <http://www.addgene.org/74923>

Proper Citation: RRID:Addgene_74923

Insert Name: LHCF2 promoter

Organism: Phaeodactylum tricornutum

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:27108533](#)

Vector Backbone Description: Backbone Marker:Stratagene; Backbone Size:2904; Vector Backbone:pBlueScript KS(+); Vector Types:CRISPR; Bacterial Resistance:Ampicillin

Comments: The diaCas9 module was synthesized by GeneArt® Services Thermo Fisher Scientific Inc. The sgRNA module was synthesized by Eurofins Genomic Services Ltd.

Plasmid Name: pKS diaCas9_sgRNA

Record Creation Time: 20220422T222456+0000

Record Last Update: 20260905T080106+0000

Ratings and Alerts

No rating or validation information has been found for pKS diaCas9_sgRNA.

No alerts have been found for pKS diaCas9_sgRNA.

Data and Source Information

Usage and Citation Metrics

We found 11 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Le Moigne D, et al. (2025) Functional study of *Phaeodactylum tricornutum* Seipin highlights specificities of lipid droplets biogenesis in diatoms. *The New phytologist*, 247(5), 2245.

Guéguen N, et al. (2024) Monogalactosyldiacylglycerol synthase isoforms play diverse roles inside and outside the diatom plastid. *The Plant cell*, 36(12), 5023.

Zhang K, et al. (2022) Functional differentiation and complementation of alkaline phosphatases and choreography of DOP scavenging in a marine diatom. *Molecular ecology*, 31(12), 3389.

Liu Y, et al. (2022) Phloroglucinol Promotes Fucoxanthin Synthesis by Activating the cis-Zeatin and Brassinolide Pathways in *Thalassiosira pseudonana*. *Applied and environmental microbiology*, 88(6), e0216021.

Seydoux C, et al. (2022) Impaired photoprotection in *Phaeodactylum tricornutum* KEA3 mutants reveals the proton regulatory circuit of diatoms light acclimation. *The New phytologist*, 234(2), 578.

Zhang K, et al. (2021) SPX-related genes regulate phosphorus homeostasis in the marine phytoplankton, *Phaeodactylum tricornutum*. *Communications biology*, 4(1), 797.

Kumar Sharma A, et al. (2020) The Myb-like transcription factor phosphorus starvation response (PtPSR) controls conditional P acquisition and remodelling in marine microalgae. *The New phytologist*, 225(6), 2380.

Helliwell KE, et al. (2019) Alternative Mechanisms for Fast Na⁺/Ca²⁺ Signaling in Eukaryotes via a Novel Class of Single-Domain Voltage-Gated Channels. *Current biology : CB*, 29(9), 1503.

Stukenberg D, et al. (2018) Optimizing CRISPR/Cas9 for the Diatom *Phaeodactylum tricornutum*. *Frontiers in plant science*, 9, 740.

Allorent G, et al. (2018) Generation of Mutants of Nuclear-Encoded Plastid Proteins Using CRISPR/Cas9 in the Diatom *Phaeodactylum tricornutum*. *Methods in molecular biology* (Clifton, N.J.), 1829, 367.

Kroth PG, et al. (2018) Genome editing in diatoms: achievements and goals. *Plant cell reports*, 37(10), 1401.