Resource Summary Report

Generated by NIF on Aug 29, 2026

pHsp70-Cas9

RRID:Addgene_45945
Type: Plasmid

Proper Citation

RRID:Addgene_45945

Plasmid Information

URL: http://www.addgene.org/45945

Proper Citation: RRID:Addgene_45945

Insert Name: Codon optimized Cas9

Bacterial Resistance: Kanamycin

Defining Citation: PMID:23709638

Vector Backbone Description: Backbone Size:2300; Vector Backbone:pHSS6; Vector Types:CRISPR; Bacterial Resistance:Kanamycin

Comments: For more information on FlyCRISPR plasmids and a list of related plasmids please refer to: https://www.addgene.org/browse/article/6834/. Plasmid 51019: pDsRed-attP (www.addgene.org/51019) can be for generating dsDNA donors for homology-directed repair to replace genes or other genomic sequence with an attP docking site.

Plasmid Name: pHsp70-Cas9

Relevant Mutation: Silent change from C to A at bp 834 of insert

Record Creation Time: 20220422T222237+0000

Record Last Update: 20260829T080559+0000

Ratings and Alerts

No rating or validation information has been found for pHsp70-Cas9.

No alerts have been found for pHsp70-Cas9.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 21 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF .

Ham SJ, et al. (2025) Reciprocal rescue of Wolfram syndrome by two causative genes. EMBO reports, 26(9), 2459.

Ham SJ, et al. (2025) Mitochondrial fumarate inhibits Parkin-mediated mitophagy. Molecular cell, 85(12), 2287.

Takagi S, et al. (2024) Olfactory sensory neuron population expansions influence projection neuron adaptation and enhance odour tracking. Nature communications, 15(1), 7041.

Schember I, et al. (2024) Conserved and novel enhancers in the Aedes aegypti single-minded locus recapitulate embryonic ventral midline gene expression. PLoS genetics, 20(4), e1010891.

Ham SJ, et al. (2023) PINK1 and Parkin regulate IP3R-mediated ER calcium release. Nature communications, 14(1), 5202.

Metzloff M, et al. (2022) Experimental demonstration of tethered gene drive systems for confined population modification or suppression. BMC biology, 20(1), 119.

Yang E, et al. (2022) A homing suppression gene drive with multiplexed gRNAs maintains high drive conversion efficiency and avoids functional resistance alleles. G3 (Bethesda, Md.), 12(6).

Langmüller AM, et al. (2022) Fitness effects of CRISPR endonucleases in Drosophila melanogaster populations. eLife, 11.

Auer TO, et al. (2022) Copy number changes in co-expressed odorant receptor genes enable selection for sensory differences in drosophilid species. Nature ecology & evolution, 6(9), 1343.

Lule-Chávez AN, et al. (2021) Genetic transformation of mosquitoes by microparticle bombardment. Insect molecular biology, 30(1), 30.

Ham SJ, et al. (2021) Loss of UCHL1 rescues the defects related to Parkinson's disease by suppressing glycolysis. Science advances, 7(28).

Carvajal-Garcia J, et al. (2021) DNA polymerase theta suppresses mitotic crossing over. PLoS genetics, 17(3), e1009267.

Champer J, et al. (2020) A toxin-antidote CRISPR gene drive system for regional population modification. Nature communications, 11(1), 1082.

Liu J, et al. (2019) Maximum Likelihood Estimation of Fitness Components in Experimental Evolution. Genetics, 211(3), 1005.

Champer J, et al. (2019) Molecular safeguarding of CRISPR gene drive experiments. eLife, 8.

Guichard A, et al. (2019) Efficient allelic-drive in Drosophila. Nature communications, 10(1), 1640.

Champer J, et al. (2018) Reducing resistance allele formation in CRISPR gene drive. Proceedings of the National Academy of Sciences of the United States of America, 115(21), 5522.

Xu XS, et al. (2017) CRISPR/Cas9 and active genetics-based trans-species replacement of the endogenous Drosophila kni-L2 CRM reveals unexpected complexity. eLife, 6.

Champer J, et al. (2017) Novel CRISPR/Cas9 gene drive constructs reveal insights into mechanisms of resistance allele formation and drive efficiency in genetically diverse populations. PLoS genetics, 13(7), e1006796.

Dong S, et al. (2015) Heritable CRISPR/Cas9-mediated genome editing in the yellow fever mosquito, Aedes aegypti. PloS one, 10(3), e0122353.