

Resource Summary Report

Generated by [RRID](#) on Aug 19, 2026

USO hisB- pyrF- rpoZ-

RRID:Addgene_18049

Type: Plasmid

Proper Citation

RRID:Addgene_18049

Plasmid Information

URL: <http://www.addgene.org/18049>

Proper Citation: RRID:Addgene_18049

Insert Name: omega knockout Bacteria hybrid selection strain

Bacterial Resistance: Tetracycline

Defining Citation: [PMID:18332042](#)

Vector Backbone Description: Backbone Size:0; Vector Backbone:XL-1 blue F' episome; Vector Types:Bacterial Expression; Bacterial Resistance:Tetracycline

Comments: This strain has a deletion in hisB, pyrF and ropZ genes (the bacterial homologs of HIS3 and URA3 and the omega subunit) and it contains a F' episome bearing the lacI^q repressor.

Plasmid Name: USO hisB- pyrF- rpoZ-

Relevant Mutation: This is the USO selection strain that has hisB, pyrF and rpoZ knocked out. A zeocin cassette has been knocked in to the rpoZ locus

Record Creation Time: 20220422T222034+0000

Record Last Update: 20260815T081126+0000

Ratings and Alerts

No rating or validation information has been found for USO hisB- pyrF- rpoZ-.

No alerts have been found for USO hisB- pyrF- rpoZ-.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 9 mentions in open access literature.

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

Ochiai H, et al. (2023) Construction and Evaluation of Zinc Finger Nucleases. Methods in molecular biology (Clifton, N.J.), 2637, 1.

Wang J, et al. (2021) Puma, noxa, p53, and p63 differentially mediate stress pathway induced apoptosis. Cell death & disease, 12(7), 659.

Toyomane K, et al. (2019) Upstream sequence-dependent suppression and AtxA-dependent activation of protective antigens in Bacillus anthracis. PeerJ, 7, e6718.

Ochiai H, et al. (2017) Construction and Evaluation of Zinc Finger Nucleases. Methods in molecular biology (Clifton, N.J.), 1630, 1.

Ichida H, et al. (2016) LDSS-P: an advanced algorithm to extract functional short motifs associated with coordinated gene expression. Nucleic acids research, 44(11), 5045.

Tsuji S, et al. (2013) Creating a TALE protein with unbiased 5'-T binding. Biochemical and biophysical research communications, 441(1), 262.

Fleisch VC, et al. (2013) Targeted mutation of the gene encoding prion protein in zebrafish reveals a conserved role in neuron excitability. Neurobiology of disease, 55, 11.

Ochiai H, et al. (2012) Zinc-finger nuclease-mediated targeted insertion of reporter genes for quantitative imaging of gene expression in sea urchin embryos. Proceedings of the National Academy of Sciences of the United States of America, 109(27), 10915.

Ochiai H, et al. (2010) Targeted mutagenesis in the sea urchin embryo using zinc-finger nucleases. Genes to cells : devoted to molecular & cellular mechanisms, 15(8), 875.