

Protocols for CRISPR/Cas9 Mutagenesis of the Oriental Fruit Fly *Bactrocera dorsalis*

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jove.com/video/64195

Materials

Name	Company	Catalog Number	Comments
6x DNA Loading Buffer	TransGen Biotech	GH101-01	
Artificial climate chamber	ShangHai BluePard	MGC-350P	
AxyPrep Genomic DNA Mini-Extraction Kit	Axygen	AP-MN-MS-GDNA-250G	
BLAT	NA	NA	For searching potential gene loci in the genome
Capillary Glass	WPI	1B100F-4	
Eppendorf InjectMan 4 micromanipulator	Eppendorf	InjectMan 4	
GeneArt Precision gRNA Synthesis Kit	Thermo Fisher Scientific	A29377	
Hisat2	NA	NA	For aligning the transcriptome to the acquired gene loci
IGV	NA	NA	For visualizing the results from Transdecoder
Microgrinder	NARISHIGE	EG-401	
Olympus Microscope	Olympus Corporation	SZ2-ILST	
pEASY-Blunt Cloning Kit	TransGen Biotech	CB101-02	https://www.transgenbiotech.com/data/upload/pdf/CB101_2022-07-14.pdf
Phenol red solution	Sigma-Aldrich	P0290-100ML	
Pipette cookbook 2018 P-97 & P-1000 Micropipette Pullers	Instrument Company		https://www.sutter.com/PDFs/cookbook.pdf
PrimeSTAR HS (Premix)	Takara Biomedical Technology	R040A	
SAMtools	NA	NA	For generating the sorted bam files
sgRNACas9-AI	NA	NA	sgRNA design http://123.57.239.141:8080/home
Sutter Micropipette Puller Sutter	Instrument Company	P-97	
Trans2K DNA Marker	TransGen Biotech	BM101-02	

Transdecoder	NA	NA	For combining the results of assemble transcripts and gene loci information https://github.com/TransDecoder/TransDecoder/releases/tag/TransDecoder-v5.5.0
TrueCut Cas9 Protein v2	Thermo Fisher Scientific	A36498	
Ultra-trace biological detector	Thermo Fisher Scientific	Nanodrop 2000C	