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Design Snapshot - 59753 (61377) - isogenic control line generation for AG25367 line

Summary

Field	Value
project_id	59753 (61377) - isogenic control line generation for AG25367 line
author	Narasimha Telugu, Maria Hofstätter
timestamp_unix	1763657963
design_platform	Benchling
cas_variant	Hi.FiCas9
pam_rule	NGG
design_source_url	https://benchling.com/simha25/f/lib_ihxDjfHL-2025_ag_diecke/seq_tjJnYpS0-psen1-ensg00000080815/edit
off_target_review	-
design_decision	-

mutation

Field	Value
gene	PSEN1 (ENSG00000080815)
transcript	PSEN1-001 (ENST00000324501, CCDS9812)
genome_assembly	GRCh38
edit_intent	SNP-KI
hgvs_c	PSEN C to A
hgvs_p	(A246E)
region_context	Exon7
base_editor_window	-
pegRNA_notes	-

selected_guides

selected_guides 1

id	PSEN1_A246E_KI_gRNA1
sequence	TGAGCCACTCAGTCCATTCA
pam	AGG
strand	-
genomic_locus	-
distance_to_edit_bp	0
on_target_algo	-
on_target_score	-
off_target_algo	-
off_target_score	-
notes	-

selected_guides 2

id	PSEN1_A246E_KI_gRNA2
sequence	ACCTCCCTGAATGGACTGAG
pam	TGG
strand	+
genomic_locus	-
distance_to_edit_bp	0
on_target_algo	-
on_target_score	-
off_target_algo	-
off_target_score	-
notes	-

additional_guides

No entries

primer_pairs

primer_pairs 1

name	PSEN1_A246E
forward	CCT ATA ACG TTG CTG TGG ACT
reverse	GAT TAC AGG CAT GAG CTA CCA
expected_amplicon_bp	412

donors

donors 1

donor_type	ssODN
sequence	PSEN1_A246E_ssODN2: CCATTCACTGGAAAGGTCCA CTTCGACTCCAGCAGGCATATCTCATTATGATTAGTGCCC TCATGGCCCTGGTGTTTATCAAGTACCTTCCTGAATGGAC TGCGTGGCTCATCTTGGCTGTGATTTC
length_nt	147
asymmetry	Assymetric 31/96
strand	non-PAM
introduces_silent_pam_or_seed_mut	Yes
hdr_notes	-

donors 2

donor_type	ssODN
sequence	PSEN1_A246E_ssODN2: AAAGAAAACACTCCAGTGGG GCATTCCTGTGACAAACAAATTATCAGTCTTGGGTTTTAC CATATACTGAAATCACAGCCAAGATGAGCCACGCTGTCCA TTCTGGGAGGTACTTGATAAACACCAG
length_nt	147
asymmetry	Assymetric 31/96
strand	non-PAM strand
introduces_silent_pam_or_seed_mut	Yes
hdr_notes	Yes

Delivery Snapshot — 59753 (61377) - isogenic control line generation for AG25367 line

Summary

Field	Value
project_id	59753 (61377) - isogenic control line generation for AG25367 line
cell_line	AG25367
passage_number	P27
delivery_goal	RNP
total_cells	250000
viability_percent	92.0
electroporation_device	Neon Transfection System
neon_tip_volume_ul	10.0
voltage_v	1200
pulse_width_ms	30.0
pulse_number	1
buffer_system	Buffer R (Neon kit)
buffer_notes	Prepared fresh, kept on ice.
assembly_notes	Add components to the cell mix
incubation_time_minutes	0.0
post_pulse_recovery_medium	StemFlex and ClonR2
post_pulse_recovery_volume_ml	1.0
recovery_temperature_c	32.0
recovery_duration_minutes	2880.0
plating_format	12-well plate
plating_density_cells_per_well	150000
additional_notes	Deliver 1200 V / 30 ms / 1 pulse per protocol. Immediately transfer to recovery medium.
author	Narasimha Telugu
timestamp_unix	1764167980

rnp_components

rnp_components 1

name	Cas9 Nuclease
component_type	Cas9
concentration	-
concentration_units	-
volume_ul	0.5
vendor	-
lot_number	IDT

rnp_components 2

name	sgRNA 1 and 2
component_type	sgRNA
concentration	-
concentration_units	-
volume_ul	2.0
vendor	IDT
lot_number	-

rnp_components 3

name	ssODN HDR donor 1 and 2
component_type	ssODN
concentration	-
concentration_units	Other
volume_ul	3.0
vendor	-
lot_number	-

# Assessment Snapshot - 59753 (61377) - isogenic control line generation for AG25367 line
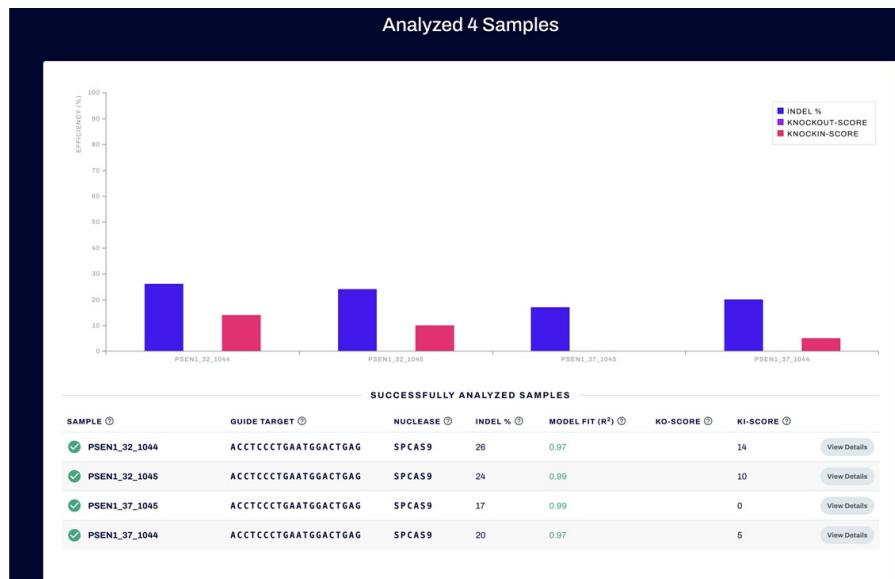
Summary

Field	Value
project_id	59753 (61377) - isogenic control line generation for AG25367 line
cell_line	AG25367
assay_type	Sanger-Indel
tool_used	ICE
total_indel_pct	23.0
ki_pct	-
hdr_pct	14.0
decision	proceed_to_cloning
pcr	-
notes	32 degrees
author	Narasimha Telugu
timestamp_unix	1764176422

top_indels

No entries

Images

Analyzed 4 Samples

SUCCESSFULLY ANALYZED SAMPLES

SAMPLE	GUIDE TARGET	NUCLEASE	INDEL %	MODEL FIT (R²)	KO-SCORE	KI-SCORE	
✅ PSEN1_32_1044	ACCTCCCTGAATGGACTGAG	SPCAS9	26	0.97		14	View Details
✅ PSEN1_32_1045	ACCTCCCTGAATGGACTGAG	SPCAS9	24	0.99		10	View Details
✅ PSEN1_37_1045	ACCTCCCTGAATGGACTGAG	SPCAS9	17	0.99		0	View Details
✅ PSEN1_37_1044	ACCTCCCTGAATGGACTGAG	SPCAS9	20	0.97		5	View Details

1764176422630_93cc62590a.jpg

Generated on 2025-11-26 17:00:22 (local)

IOTA Cloning Snapshot - 59753 (61377) - isogenic control line generation for AG25367 line

Summary

Field	Value
project_id	59753 (61377) - isogenic control line generation for AG25367 line
cell_line	AG25367 line
operator	Narasimha Telugu
date	2025-11-27
notes	-
timestamp_unix	1764247517

development

thaw_plate

Field	Value
done	Yes
notes	-
file_path	-

plate_on_iota

Field	Value
done	Yes
notes	-
file_path	/workspaces/ASSUREDChain/data/projects/59753 (61377) - isogenic control line generation for AG25367 line/uploads/cloning/1764247423854_62b37c3cf3.jpg

extract_clones

Field	Value
done	Yes
notes	-
file_path	-

isolate_dna

Field	Value
done	Yes
notes	-
file_path	-

feed_plate1

Field	Value
done	Yes
notes	-
file_path	-

feed_plate2

Field	Value
done	Yes
notes	-
file_path	-

verification

pcr_seq

Field	Value
done	Yes
notes	-
file_path	/workspaces/ASSUREDChain/data/projects/59753 (61377) - isogenic control line generation for AG25367 line/uploads/cloning/1764246998701_d47d70b987.jpg

seq_analysis

Field	Value
done	Yes

Field	Value
notes	-
file_path	/workspaces/ASSUREDChain/data/projects/5 9753 (61377) - isogenic control line gen eration for AG25367 line/uploads/cloning /1764246998711_643769003e.jpg

split_positive

Field	Value
done	Yes
notes	Positive clones; CL-18, 15, 16, 22, 17, 19, 2, 4, Control lines: Cl-1, 14, 20 , and 24 (Unedited Control single cell c lones, freeze two clones)
file_path	-

report

Field	Value
done	Yes
notes	-
file_path	-

seedbank

split_positive

Field	Value
done	Yes
notes	-
file_path	-

produce_seedbank

Field	Value
done	Yes
notes	Stored at LIN Box2
file_path	-

prepare_gdna

Field	Value
done	Yes
notes	Stored at -20
file_path	-

transfer_validation

Field	Value
done	Yes
notes	Given three clones to gropu
file_path	-
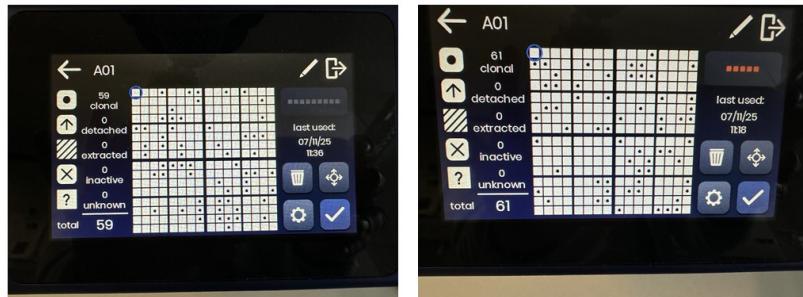
karyo

submit_samples

Field	Value
done	Yes
notes	-
file_path	-
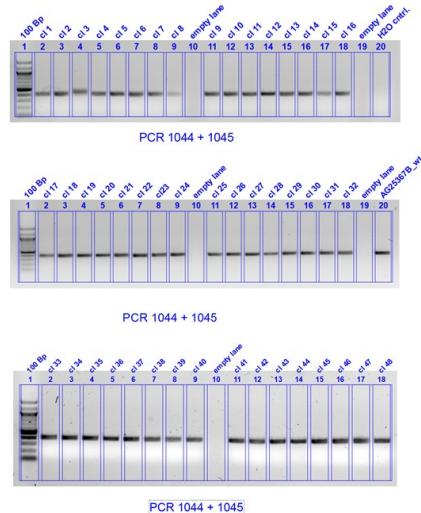
analyze_and_establish_master

Field	Value
done	Yes
notes	Bonn karyotyping
file_path	-
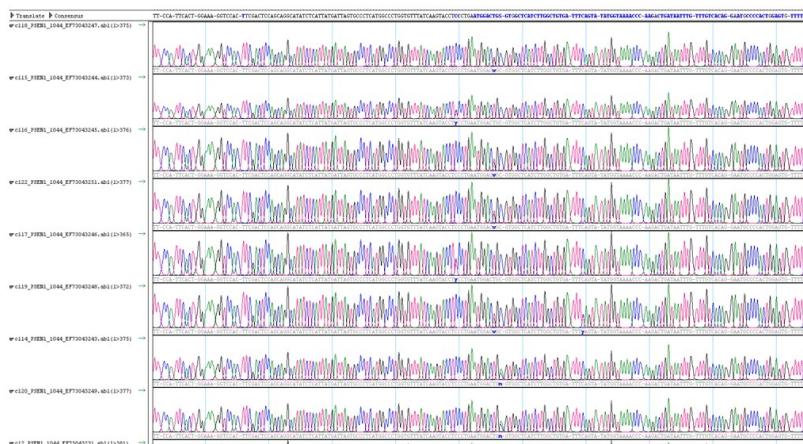
Images

1764247423854_62b37c3cf3.jpg

PCR 1044 + 1045

PCR 1044 + 1045

PCR 1044 + 1045

1764246998701_d47d70b987.jpg

1764246998711_643769003e.jpg

Generated on 2025-11-27 12:45:17 (local)

Master Bank Registry Snapshot

Summary

Field	Value
timestamp_unix	1764255734

entries

MB1

Field	Value	Field	Value
IRIS_ID	IRIS001	edit_Name	PSEN2-SNP-KI
HPSCReg_Name	BIHi005-A-1X	status	running
Reason_ForHold		Banking	Done
Morph	Done	Flourescence	Done
Myco	Done	Cellpellet_Max	Done
SNP	Done	STR	Done
Cellpellet_PCR	Done	verification	Done
g_Banding	Done	Pluri_FACS	
PluriIF_Staining		Trilineage	
COA		CTS	
Responsible_Person	Alice	MB_type	
Bemerkung		LN2_Seedbank	
Masterbank_freezing_Date	2025-10-30	Bank_size	24
LN2_Masterbank	LIN2, Bix3, 10-50		

Attachments

Field	Value
Morph	/workspaces/ASSUREDChain/data/projects/59753 (61377) - isogenic control line generation for AG25367 line/uploads/master_bank_registry/1764255247300_0cf8ba4d68.jpg

| Field	Value
verification	/workspaces/ASSUREDChain/data/projects/59753 (61377) - isogenic control line generation for AG25367 line/uploads/master_bank_registry/1764255247310_e862cd4006.jpg
SNP	/workspaces/ASSUREDChain/data/projects/59753 (61377) - isogenic control line generation for AG25367 line/uploads/master_bank_registry/1764255247317_26f7b9e085.png

MB2
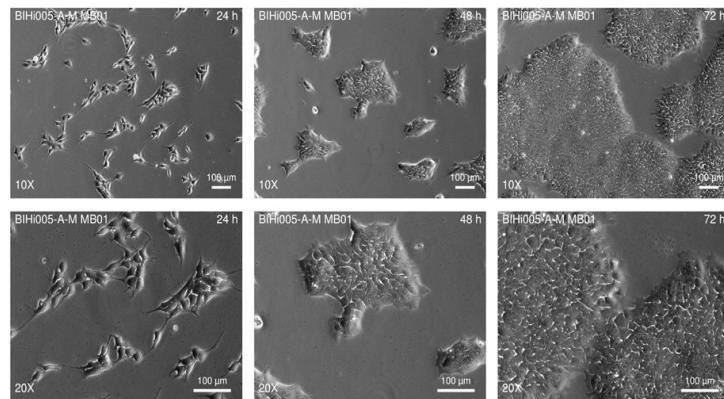
| Field	Value	Field	Value
IRIS_ID	IRIS001	edit_Name	PSEN2-SNP-KI
HPSCReg_Name	BIHi005-A-1Y	status	running
Reason_ForHold		Banking	Done
Morph	Done	Flourescence	Done
Myco	Done	Cellpellet_Max	Done
SNP	Done	STR	Done
Cellpellet_PCR	Done	verification	Done
g_Banding	Done	Pluri_FACS	
PluriIF_Staining		Trilineage	
COA		CTS	
Responsible_Person	Alice	MB_type	
Bemerkung		LN2_Seedbank	
Masterbank_freezing_Date	2025-10-30	Bank_size	24
LN2_Masterbank	LIN2, Bix3, 10-50		

Attachments
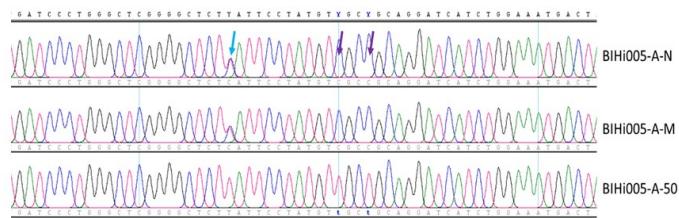
Field	Value
Morph	/workspaces/ASSUREDChain/data/projects/59753 (61377) - isogenic control line generation for AG25367 line/uploads/master_bank_registry/1764255247414_e91ea9961a.jpg
verification	/workspaces/ASSUREDChain/data/projects/59753 (61377) - isogenic control line generation for AG25367 line/uploads/master_bank_registry/1764255247423_39463a91cd.jpg

| Field	Value
SNP	/workspaces/ASSUREDChain/data/projects/5 9753 (61377) - isogenic control line gen eration for AG25367 line/uploads/master_ bank_registry/1764255247434_981b14e327.p ng
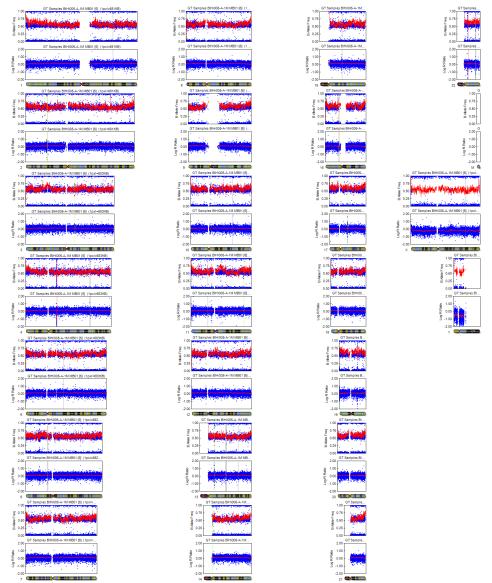
Images
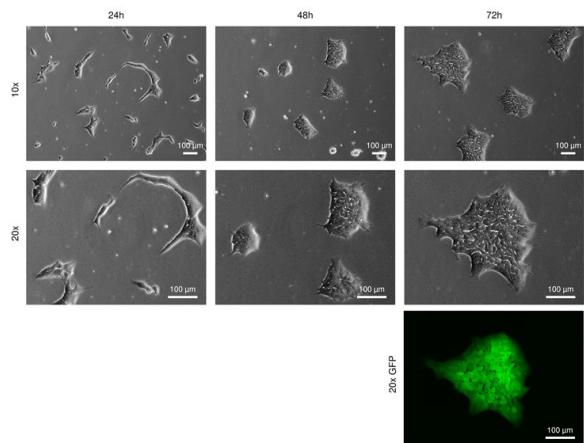

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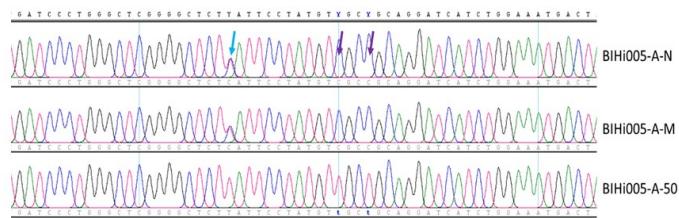
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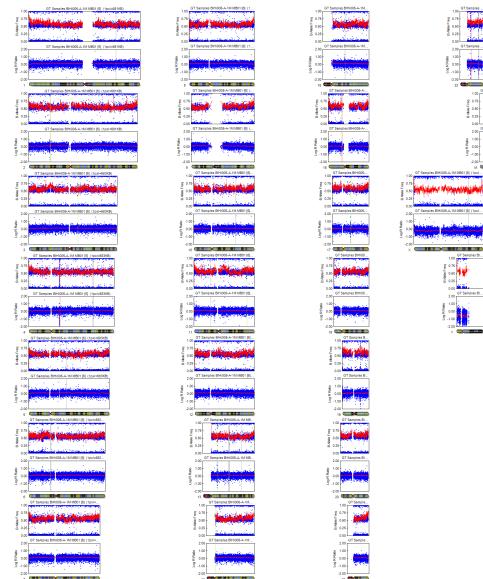
1764255247317_26f7b9e085.png

1764255247414_e91ea9961a.jpg

GATCCCTGGGCTCGGGGCTCTTATTCCTATGTYGCYGCAGGATCATCTGGAAATGACT

BIHi005-A-N

BIHi005-A-M

BIHi005-A-50

1764255247423_39463a91cd.jpg

1764255247434_981b14e327.png

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