

Study-20-568 PACT424C neoTCR cloning

Version 1.3

Study # 20-568

Study ID PACT424C NeoTCR cloning

Responsible Scientist Jessica Carlson

Date 5th November, 2020

 $neoTCRs\ were\ received\ from\ imPACT\ and\ were\ cloned\ into\ the\ HR\ template\ cloning\ plasmid$ **Study Objective**

Report generated by Pankaj Tiwari / 25th May, 2021

Initial Study Reviewed By Review Pending Final Study Reviewed By Review Pending

Treatment Day 1: Amplification and purification of TCR alpha and beta genes $\,$

Day 2: Gibson Assembly, bacterial transformation

Day 3: Colony PCR, amplicon sequencing, single colony streaking

Day 4: Colony PCR amplicon sequencing analysis, liquid culture inoculation, bacterial lawn plate streaking Day 5: Mini-prep, plasmid gel analysis, full plasmid sequencing

 $Day\ 6: Full\ plasmid\ sequencing\ analysis,\ bacterial\ plate\ sent\ for\ maxi\ plasmid\ production$

Readouts Amplicon sequencing $Full\ plasmid\ sequencing$ Agarose gel electrophoresis

1.0 Material and Methods

Reagent IDs:

Plate ID:

Reagent:
RT/PCR-3 (3rd round) amplification cDNA plate

 $PACT424C_M01_EXP20002042_Plate_out$

Experiment List:

Date	Experiment	Description	Initials
5th November, 2020	20002077	[PD-008] neoTCR PCR amplification	JC .
6th November, 2020	20002078	[PD-008] Gibson Assembly	1c
9th November, 2020	20002079	[PD-008] Colony PCR	1c
11th November, 2020	20002080	[PD-008] Miniprep, Gel Analysis, Full Plasmid Sequencing	1c
10th November, 2020	20002081	[PD-008] Innoculate liquid Culture/bacterial lawn plate	1c
12th November, 2020	20002082	[PD-008] Full Plasmid Sequencing Analysis	1c

Raw data location: "W:\PACT-0101\0030_PACT424C\06_GE \1_Raw_Data"

2.0 RESULTS

Summary

- 10 TCRs delivered to Gene Editing
- Initiated cloning for 15 TCR plasmids including TCR variants
 8 TCR plasmids delivered to downstream processes
 - 7 plasmids were dropped
 - PACT424C TCR801A01
 PACT424C TCR801A02
 PACT424C TCR804B01
 PACT424C TCR804B03
 PACT424C TCR808A01
 PACT424C TCR808A02

 - PACT424C_TCR808A07

Summary Table

TCRs sent to GE	TCR cloning initiated	TCR plasmids delivered	Mutations present	Reason for dropped TCR	TCR variants cloned
PACT424C_TCR796	PACT424C_TCR796	p948-PACT424C_TCR796	None	N/A	1/1
PACT424C_TCR797	PACT424C_TCR797	p949-PACT424C_TCR797	None	N/A	1/1
PACT424C_TCR798	PACT424C_TCR798	p950-PACT424C_TCR798	None	N/A	1/1
PACT424C_TCR799	PACT424C_TCR799	p951-PACT424C_TCR799	None	N/A	1/1



Study-20-568 PACT424C neoTCR cloning

Version 1.3

PACT424C_TCR800	PACT424C_TCR800	p952-PACT424C_TCR800	None	N/A	1/1	
PACT424C_TCR801	PACT424C_TCR801A01	N/A	None	PCR generated mutation	0/2	
FAC1424C_ICR001	PACT424C_TCR801A02	N/A	None	PCR generated mutation		
PACT424C_TCR802	PACT424C_TCR802	p953-PACT424C_TCR802	None	N/A	1/1	
PACT424C TCR804	PACT424C_TCR804B01	N/A	None	PCR generated mutation	0/2	
FAC1424C_1CR004	PACT424C_TCR804B03	N/A	None	PCR generated mutation		
PACT424C_TCR807	PACT424C_TCR807	p956-PACT424C_TCR807	None	N/A	1/1	
	PACT424C_TCR808A06	p955- PACT424C_TCR808A06	None	N/A	1/4	
PACT424C_TCR808	PACT424C_TCR808A01	N/A	None	Unable to amplify		
_	PACT424C_TCR808A02	N/A	None	Unable to amplify		
	PACT424C_TCR808A07	N/A	None	Other		

Conclusions:

 $8\ TCR$ plasmids (8 TCRs) were delivered to downstream processing. 7 TCR plasmids (2 TCRs) were dropped.