FIG. 1

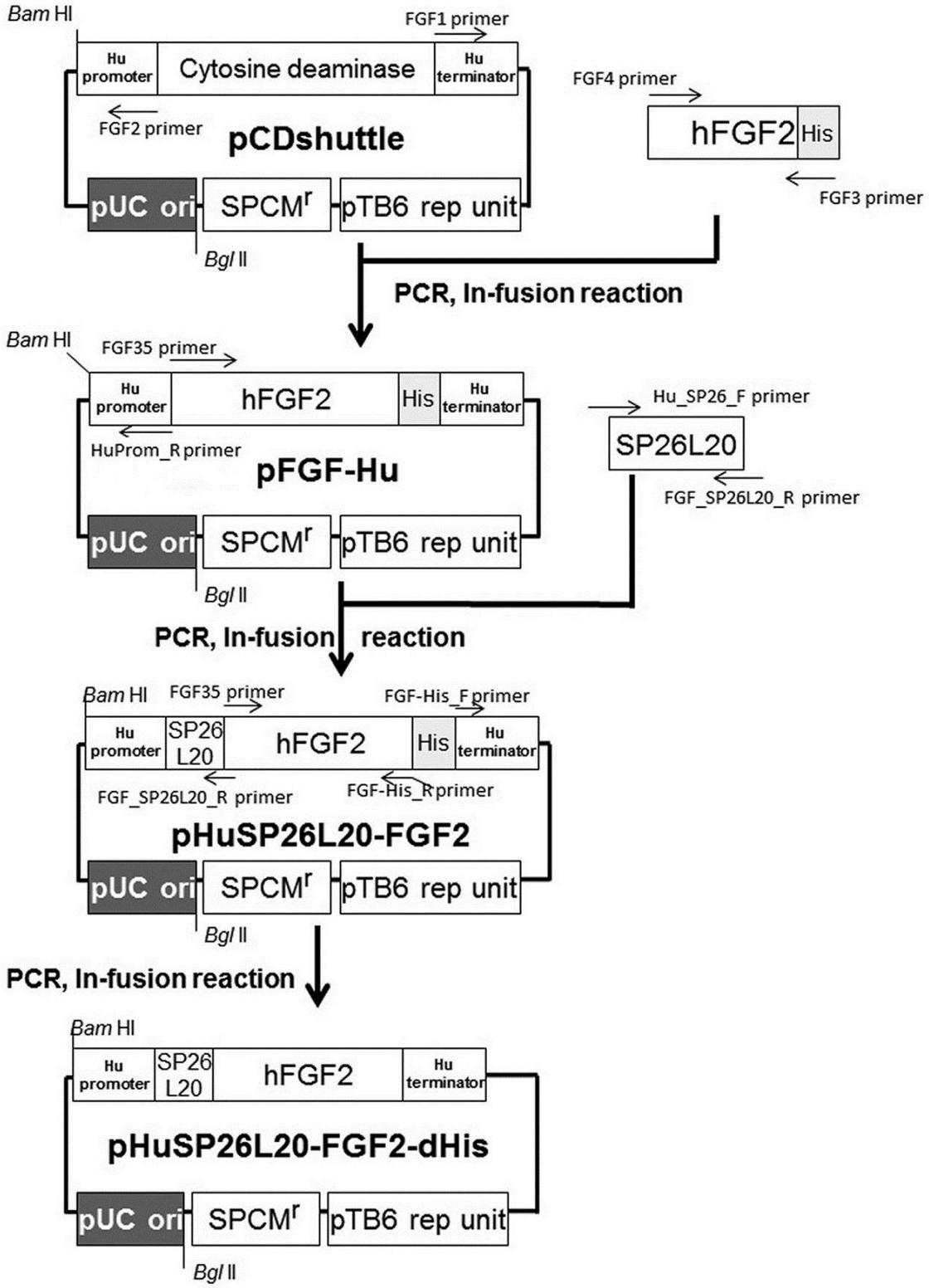

Bam HI
FGF1 primer
Hu promoter
Cytosine deaminase
Hu terminator
FGF2 primer
pCDshuttle
pUC ori
SPCMr
pTB6 rep unit
Bgl II
FGF4 primer
hFGF2
His
FGF3 primer
PCR, In-fusion reaction
Bam HI
FGF35 primer
Hu promoter
hFGF2
His
Hu terminator
HuProm_R primer
pFGF-Hu
pUC ori
SPCMr
pTB6 rep unit
Bgl II
Hu_SP26_F primer
SP26L20
FGF_SP26L20_R primer
PCR, In-fusion reaction
Bam HI
FGF35 primer
FGF-His_F primer
Hu promoter
SP26 L20
hFGF2
His
Hu terminator
FGF_SP26L20_R primer
FGF-His_R primer
pHuSP26L20-FGF2
pUC ori
SPCMr
pTB6 rep unit
Bgl II
PCR, In-fusion reaction
Bam HI
Hu promoter
SP26 L20
hFGF2
Hu terminator
pHuSP26L20-FGF2-dHis
pUC ori
SPCMr
pTB6 rep unit
Bgl II

FIG. 2

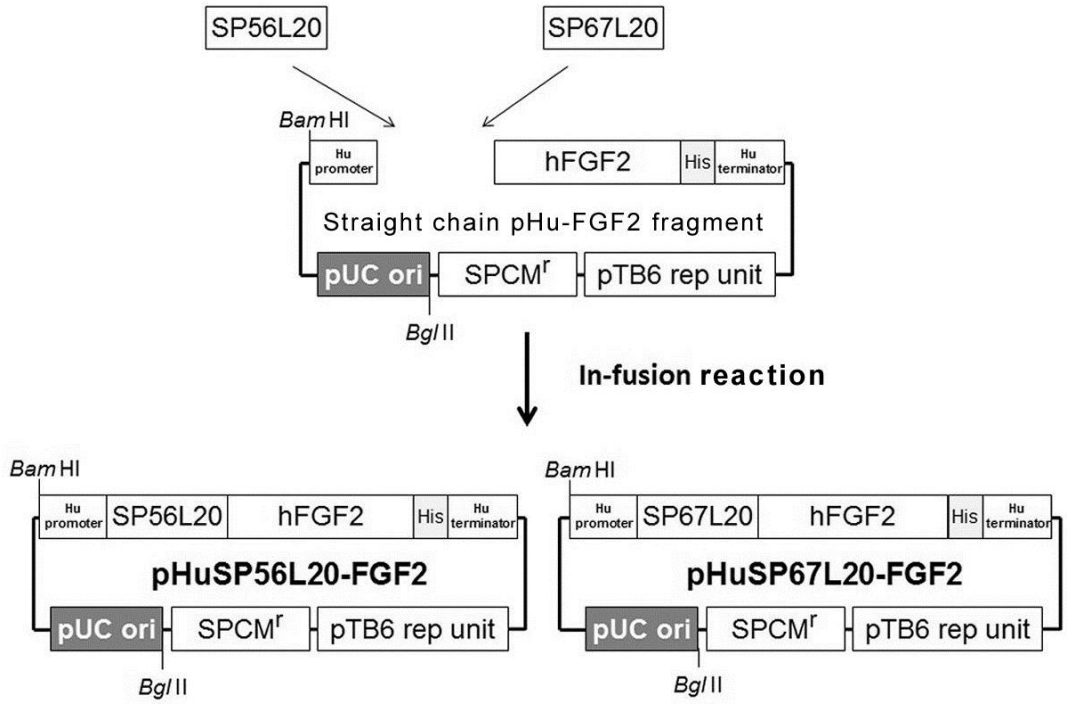

SP56L20
SP67L20
BamHI
Hu promoter
hFGF2
His
Hu terminator
Straight chain pHu-FGF2 fragment
pUC ori
SPCM^r
pTB6 rep unit
BglII
In-fusion reaction
BamHI
Hu promoter
SP56L20
hFGF2
His
Hu terminator
pHuSP56L20-FGF2
pUC ori
SPCM^r
pTB6 rep unit
BglII
BamHI
Hu promoter
SP67L20
hFGF2
His
Hu terminator
pHuSP67L20-FGF2
pUC ori
SPCM^r
pTB6 rep unit
BglII

FIG.3

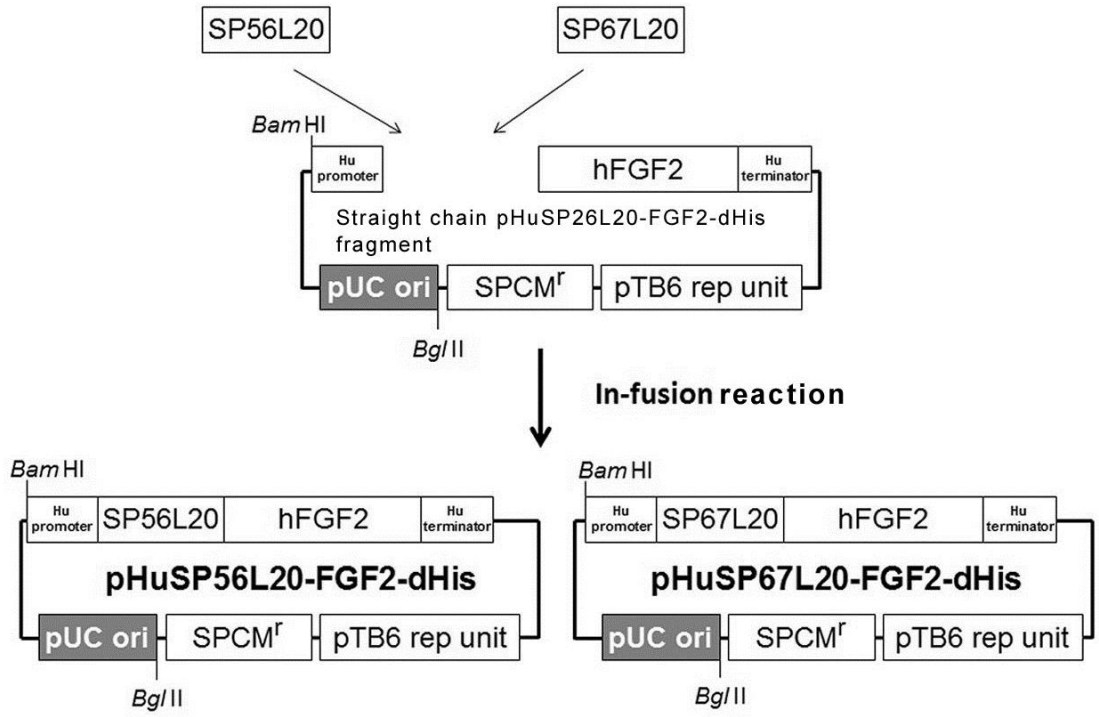

SP56L20
SP67L20
BamHI
Hu promoter
hFGF2
Hu terminator
Straight chain pHuSP26L20-FGF2-dHis fragment
pUC ori
SPCM^r
pTB6 rep unit
BglII
In-fusion reaction
BamHI
Hu promoter
SP56L20
hFGF2
Hu terminator
pHuSP56L20-FGF2-dHis
pUC ori
SPCM^r
pTB6 rep unit
BglII
BamHI
Hu promoter
SP67L20
hFGF2
Hu terminator
pHuSP67L20-FGF2-dHis
pUC ori
SPCM^r
pTB6 rep unit
BglII

FIG. 4

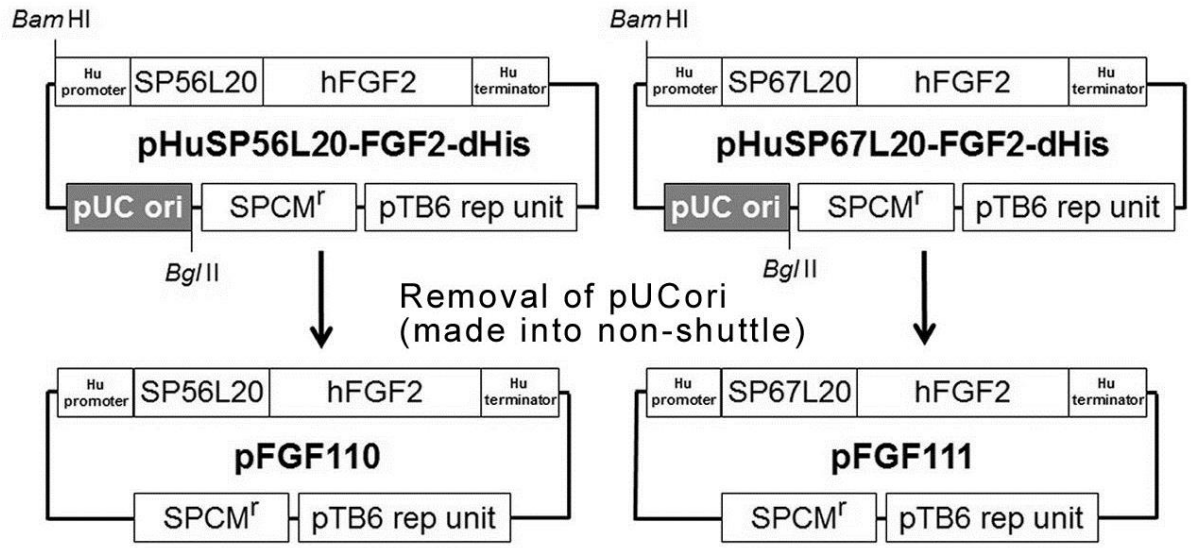
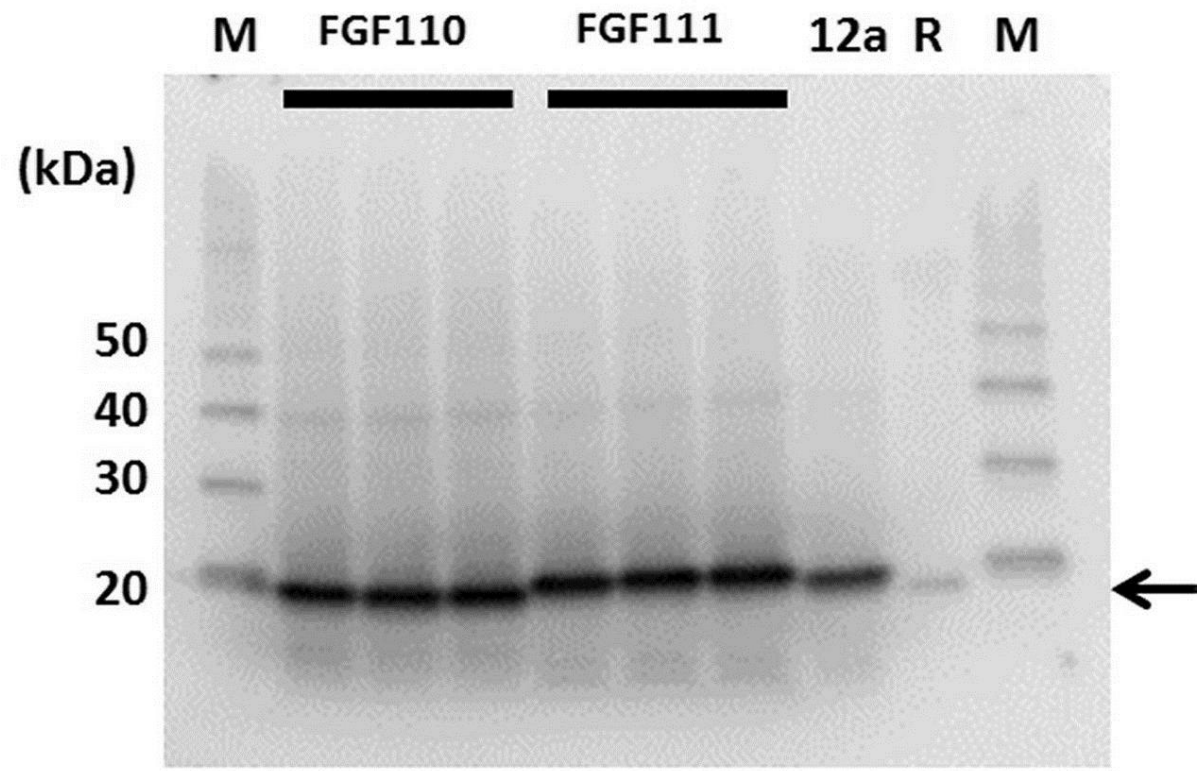


FIG. 5



Detected with anti-human FGF2 antibody

FIG. 6

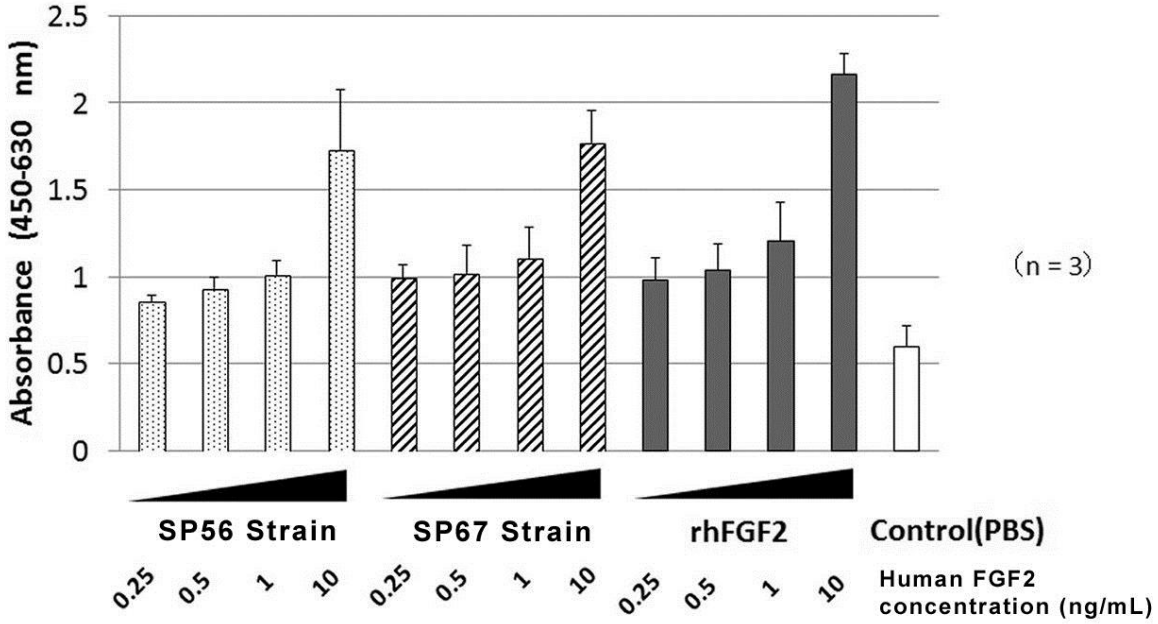

Absorbance (450-630 nm)
2.5
2
1.5
1
0.5
0
(n = 3)
SP56 Strain
SP67 Strain
rhFGF2
Control(PBS)
0.25
0.5
1
10
Human FGF2 concentration (ng/mL)

FIG. 7

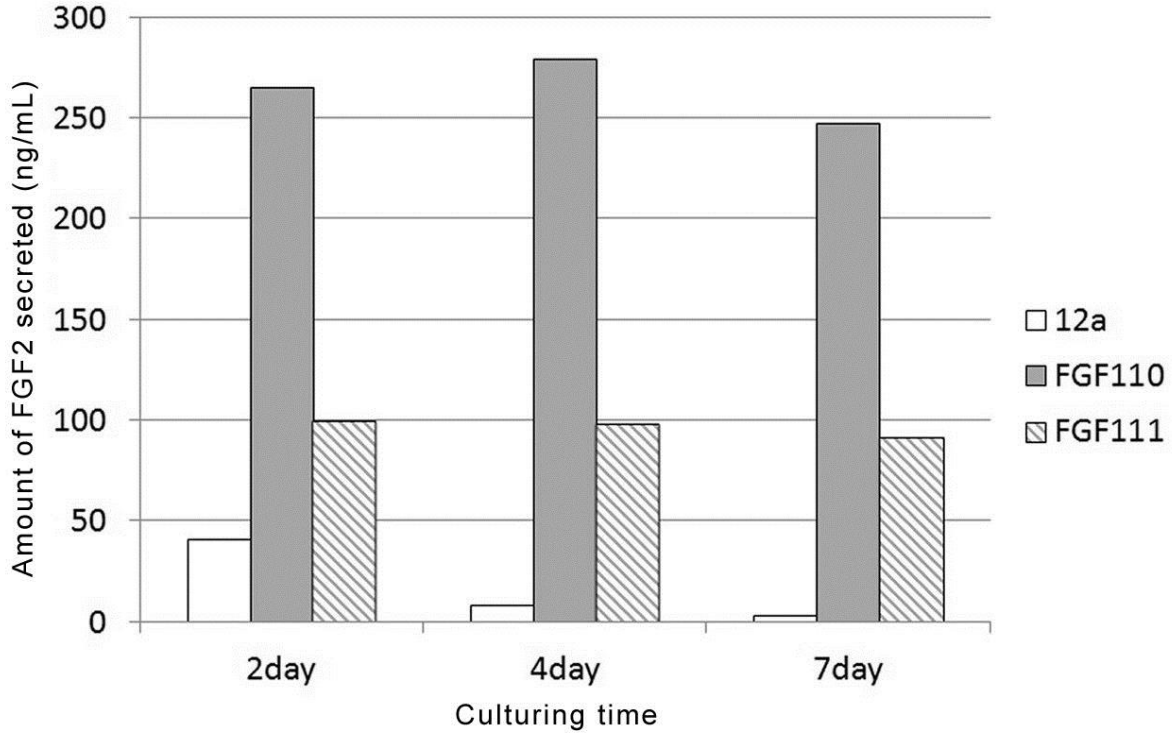
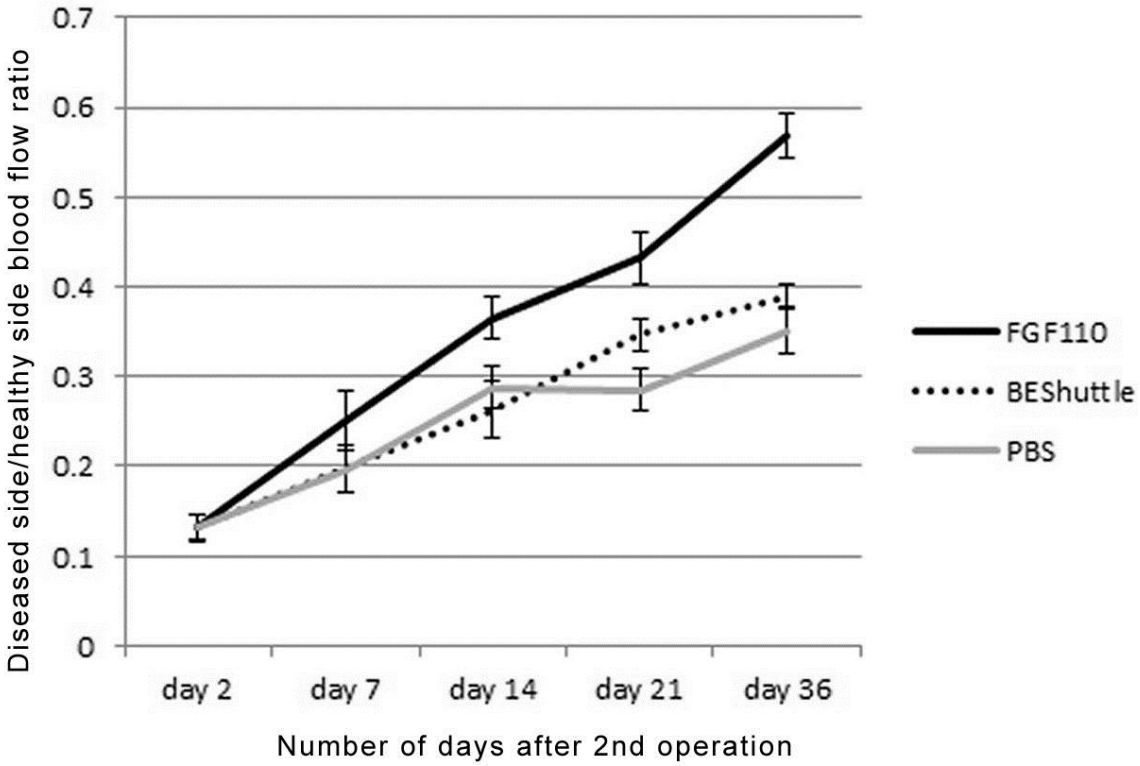

Amount of FGF2 secreted (ng/mL)
300
250
200
150
100
50
0
2day
4day
7day
Culturing time
12a
FGF110
FGF111

FIG. 8


0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Diseased side/healthy side blood flow ratio
day 2
day 7
day 14
day 21
day 36
Number of days after 2nd operation
FGF110
BEShuttle
PBS