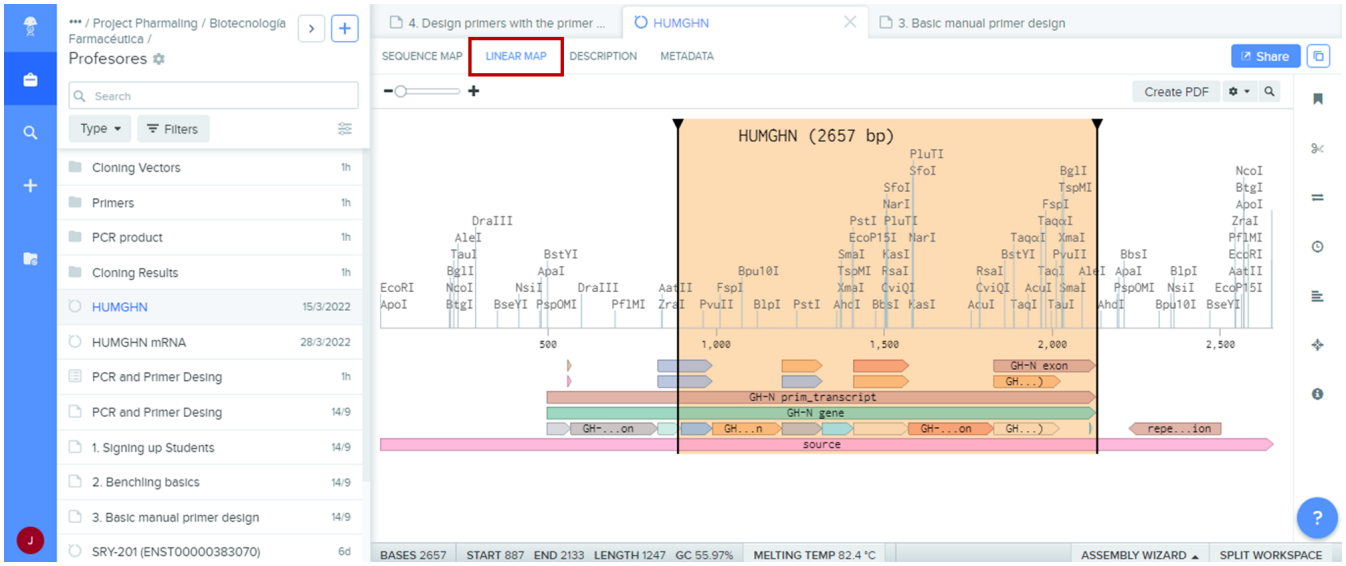
3. Design primers with the primer wizard

MIÉRCOLES, 21/9/2022

This doc will explain how to create and modify primers using Benchling primer wizard.

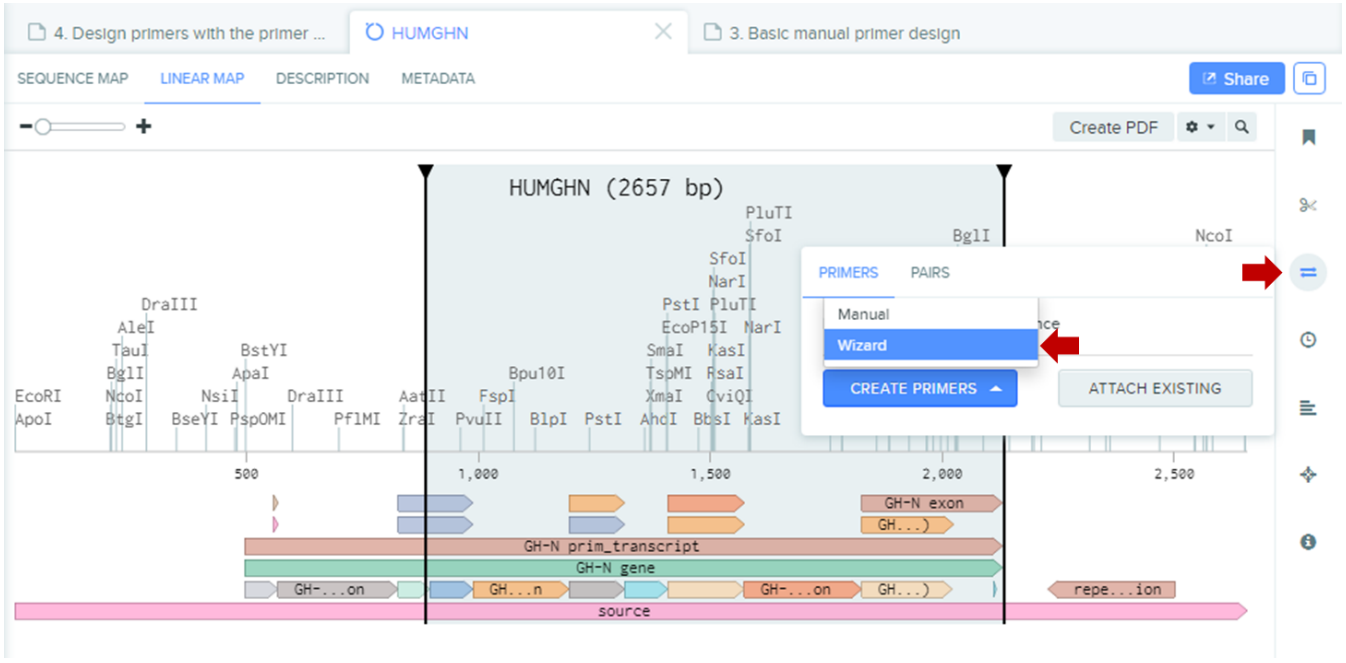
- 1. Open your sequence (sample) and click on the sequence Linear Map to have a look at it. Select the target sequence with the mouse clicking and dragging over the map (**Image 1**).

Image 1



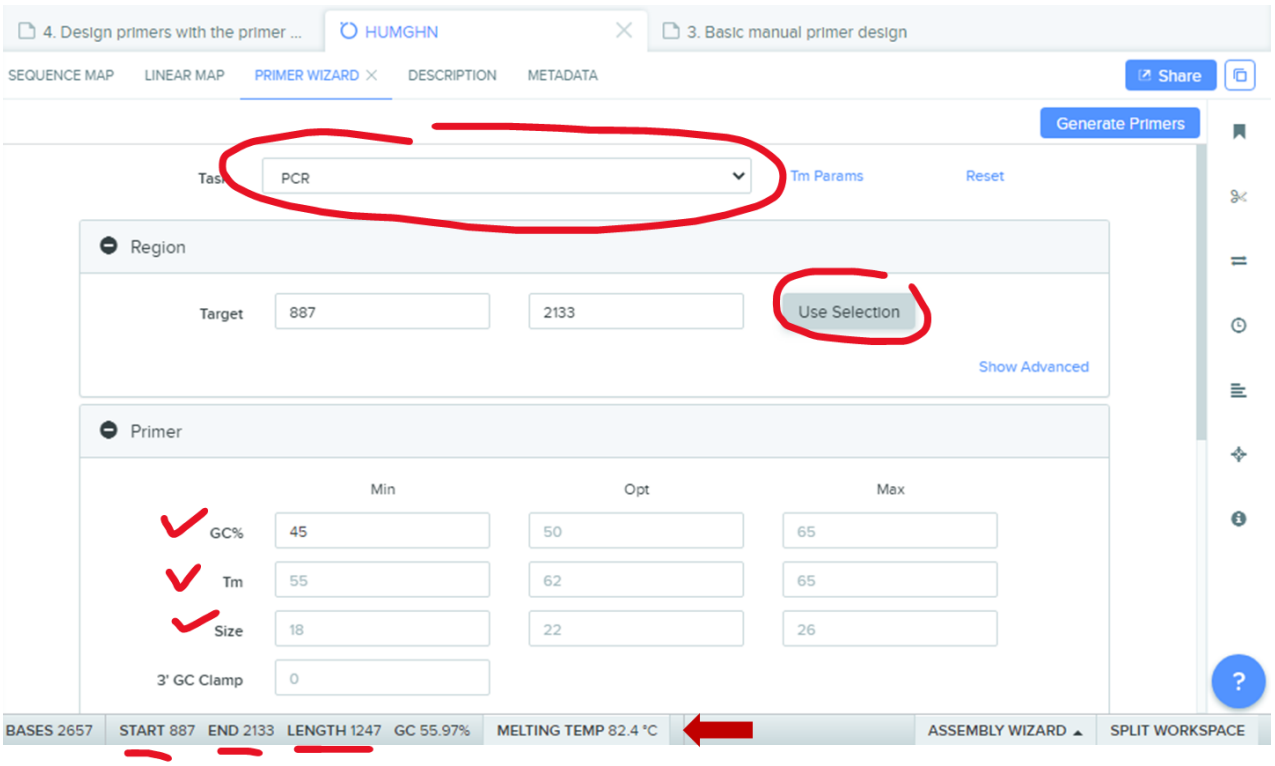
- 2. Click the Primer button on the right side bar. Select Create Primers > Wizard. (**Image 2**)

Image 2



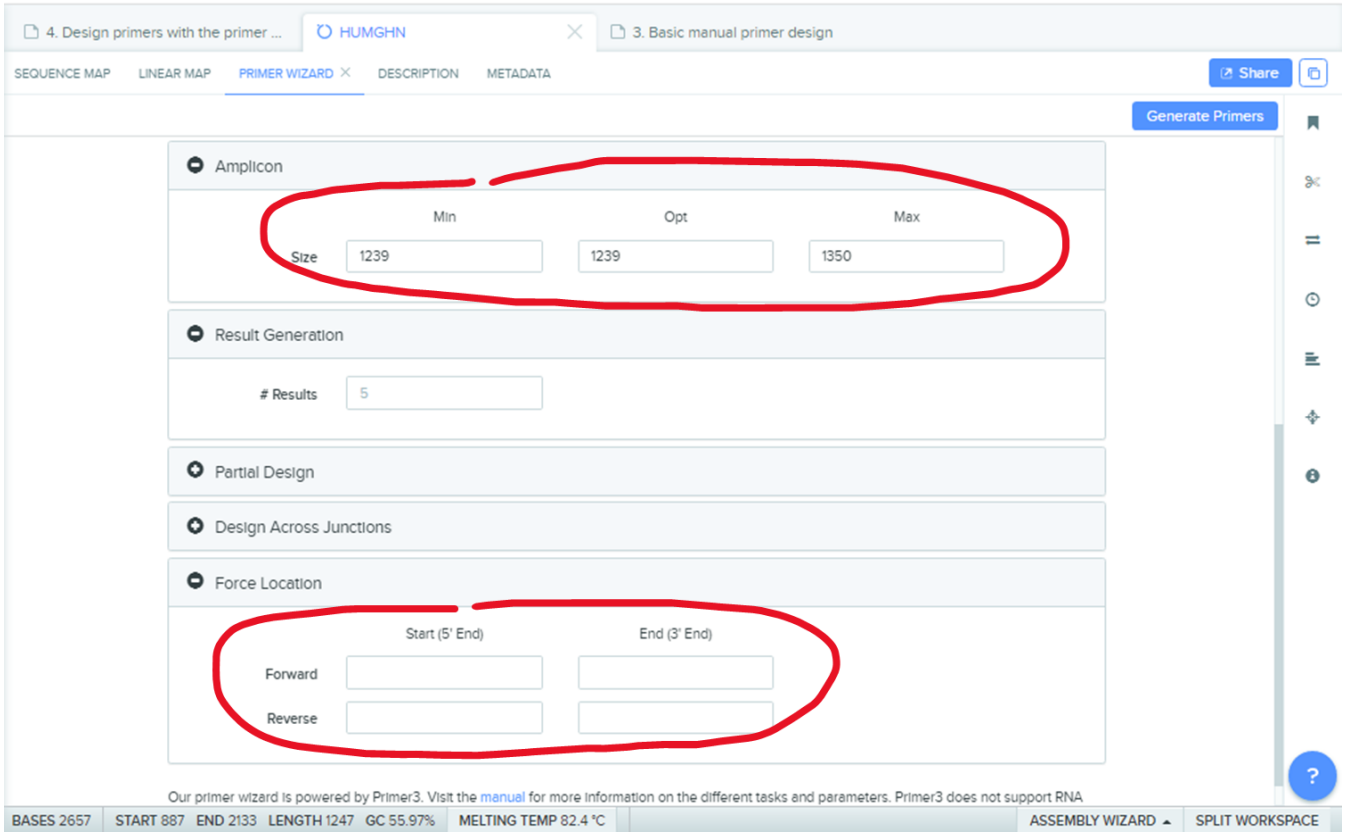
- 3. A new window will pop up where we can complete different parameters to generate the primers. Select **PCR** as the "**task"** for the primers. Click on "**use selection"** to add the selected sequence from step 1 as the target DNA. Complete the parameters for the primers like GC content, Tm or size. At the bottom of the window there is important and useful information to help you with details of the sequence like target length. (**Image 3**)

Image 3



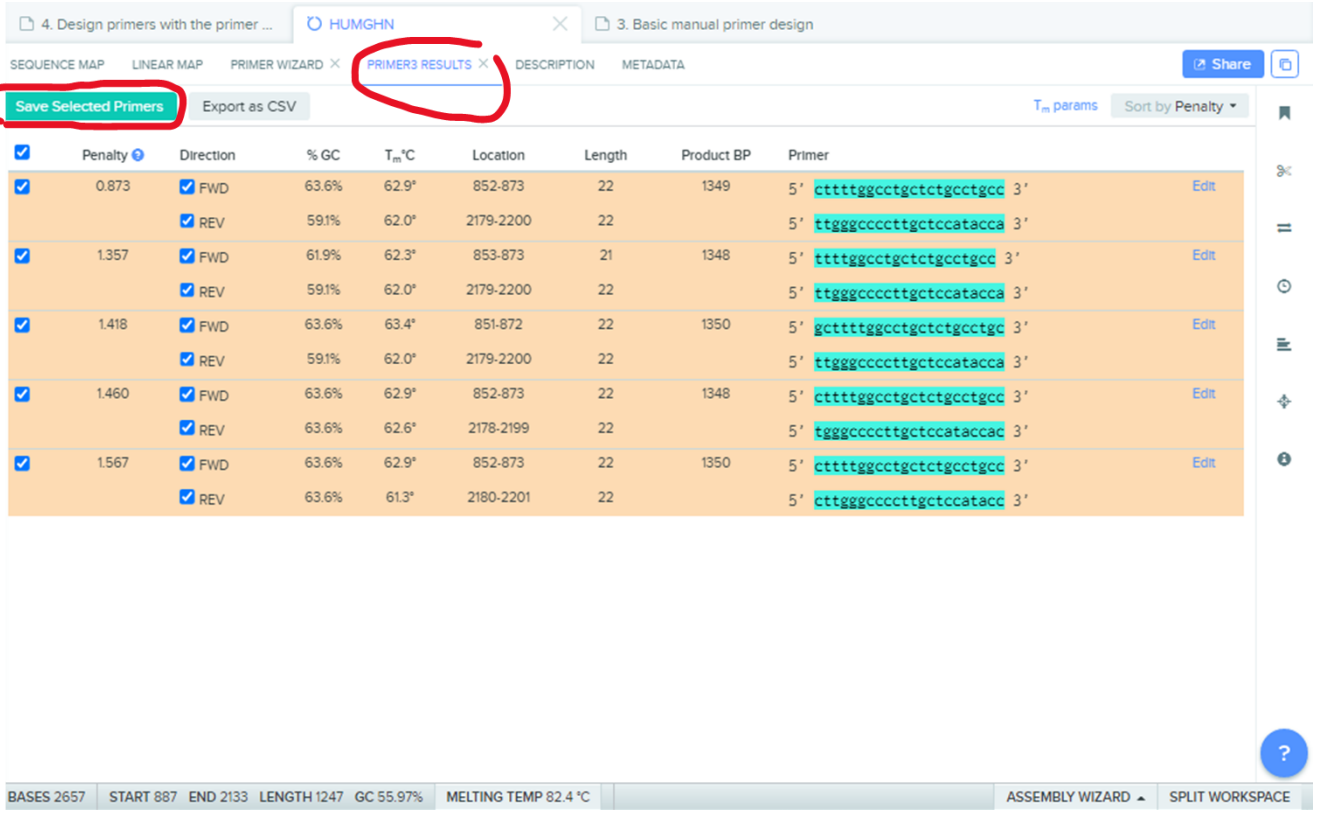
- 4. Scroll down to reach for more parameter and complete them, specially the **Amplicon size** window, the number of primers to be generated (**Results generation**) and, when need it, the **Forced Location** that will help with generating the primers on an specific position. (**Image 4**)

Image 4



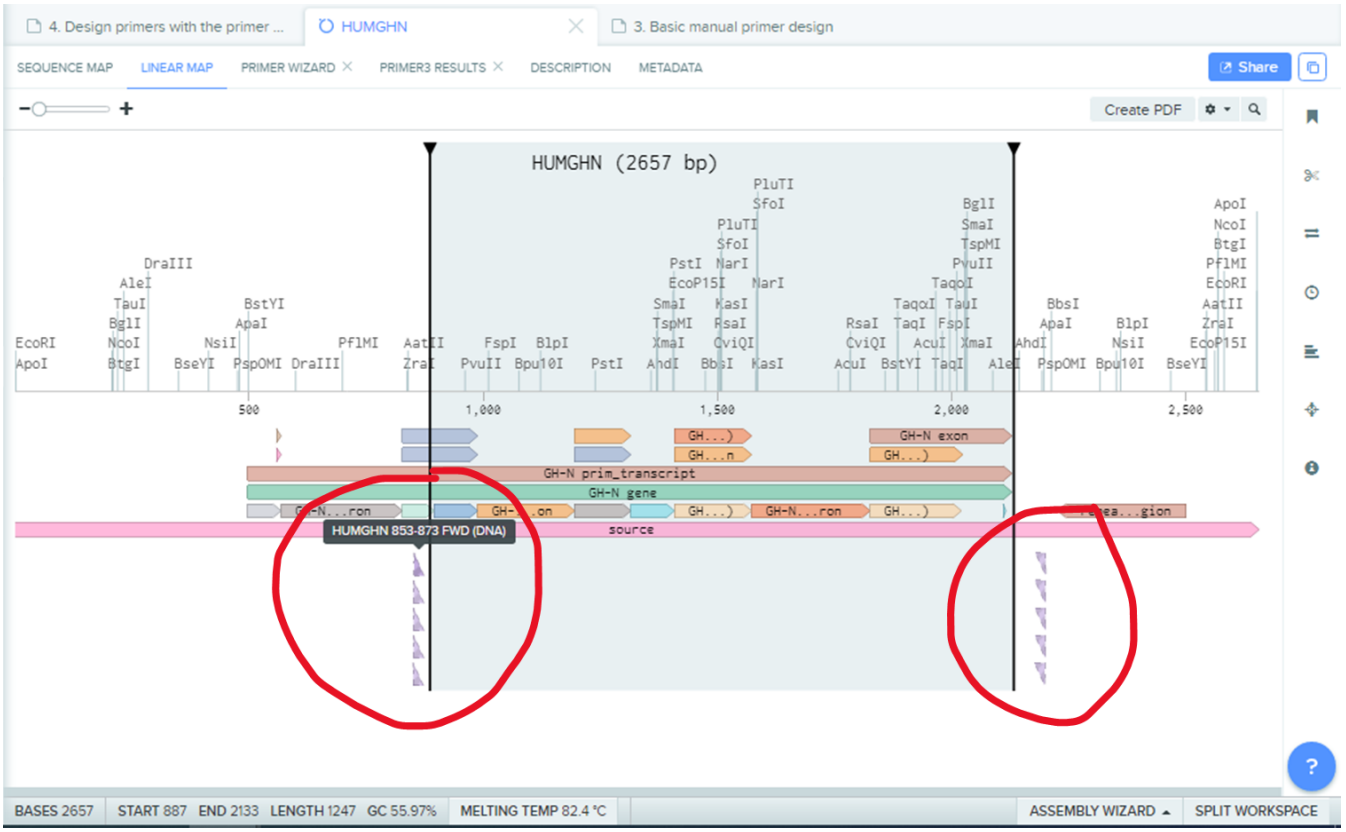
- 5. Click on generate primers. A new result primer window will pop up where you can select a pair or many primers to be saved on your folder of choice. (**Image 5**). Before saving, it could be useful to see the primers location, see step 6.

Image 5



- 6. It is useful to have a look to the location of the primers on the target sequence. This can be done by going back to the lineal map where now the primers will appear. (**Image 6**)

Image 6


4. Design primers with the primer ...
HUMGHN
3. Basic manual primer design
SEQUENCE MAP
LINEAR MAP
PRIMER WIZARD
PRIMER3 RESULTS
DESCRIPTION
METADATA
Share
Create PDF
HUMGHN (2657 bp)
PluTI
SfoI
BglI
SmaI
TspMI
PvuII
TaqαI
ApoI
NcoI
BtgI
PflMI
EcoRI
AatII
ZraI
EcoP15I
DraIII
AleI
TauI
BglI
NcoI
BtgI
BstYI
ApaI
NsiI
BseYI
PspOMI
DraIII
PflMI
AatII
ZraI
FspI
BlpI
PvuII
Bpu10I
PstI
SmaI
TspMI
XmaI
PstI
EcoP15I
NarI
KasI
AhdI
BbsI
KasI
RsaI
CviQI
AcuI
TaqαI
TauI
FspI
XmaI
BstYI
TaqI
AleI
BbsI
ApaI
AhdI
PspOMI
BlpI
NsiI
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GH-N exon
GH...)
GH-N prim_transcript
GH-N gene
GH-N...ron
GH-...on
GH...)
GH-N...ron
GH...)
source
HUMGHN 853-873 FWD (DNA)
BASES 2657
START 887
END 2133
LENGTH 1247
GC 55.97%
MELTING TEMP 82.4 °C
ASSEMBLY WIZARD
SPLIT WORKSPACE