FIG. 1

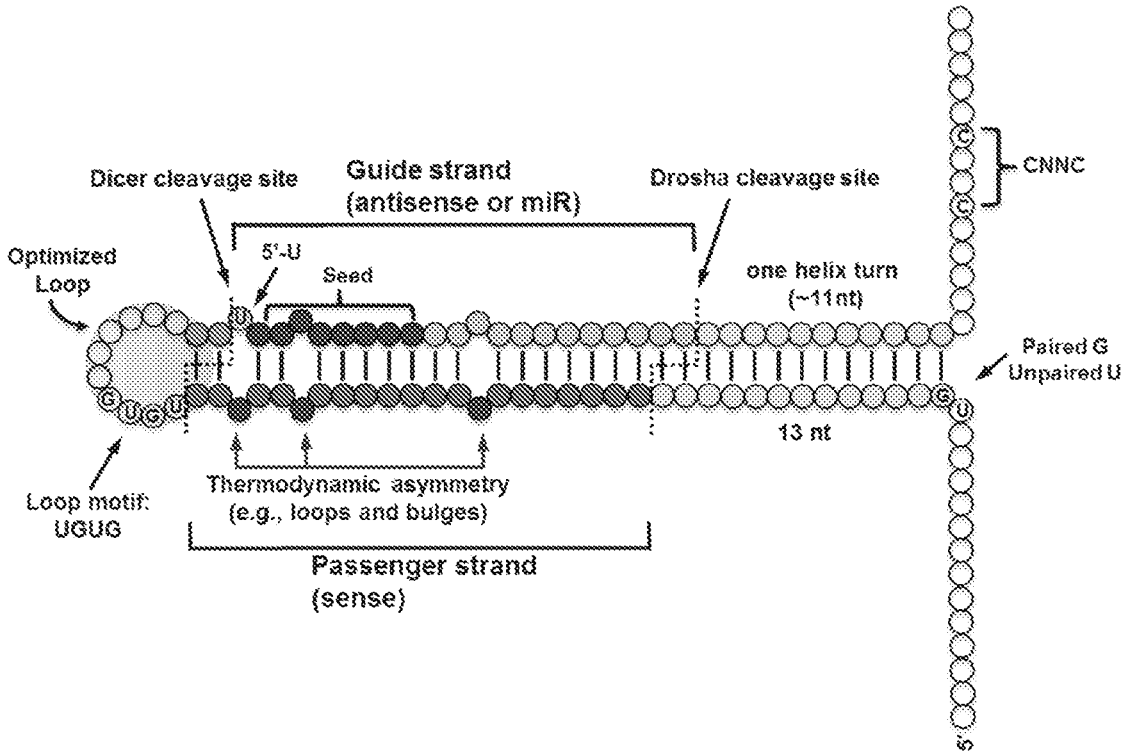
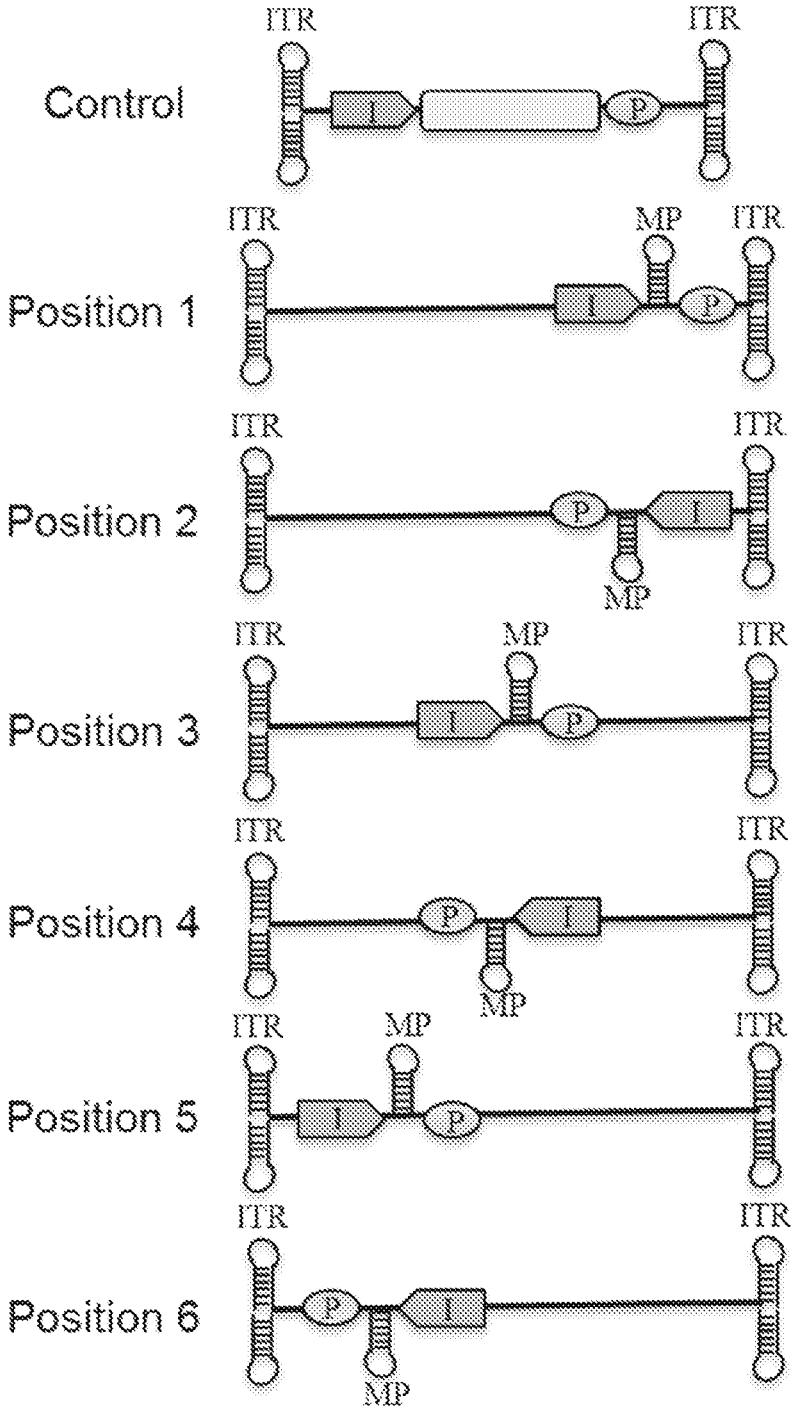

Dicer cleavage site
Guide strand
(antisense or miR)
Drosha cleavage site
CNNC
Optimized
Loop
5'-U
Seed
one helix turn
(~11nt)
Paired G
Unpaired U
13 nt
Loop motif:
UGUG
Thermodynamic asymmetry
(e.g., loops and bulges)
Passenger strand
(sense)
5'

FIG. 2


Control
ITR
I
P
ITR
Position 1
ITR
MP
ITR
Position 2
Position 3
Position 4
Position 5
Position 6