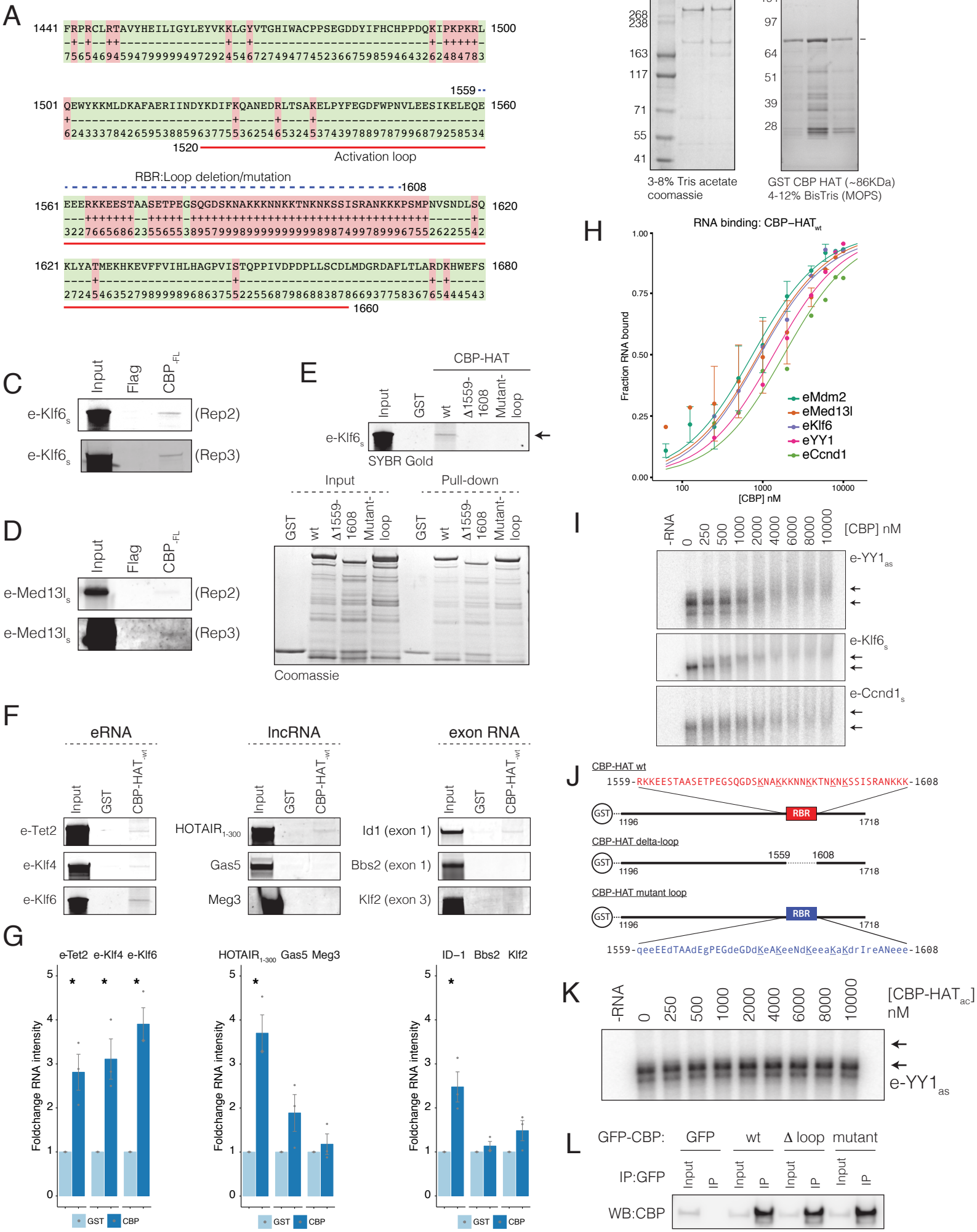
Figure S4


A
1441 FRPRCLRTAVYHEILIGYLEYVKKLGYVTGHIWACPPSEGDDYIFHCHPPDQKIPKPKRL 1500
1559
1501 QEWYKKMLDKAFAERIINDYKDIFKQANEDRLTSAKELPYFEGDFWPNVLEESIKELEQE 1560
1520
Activation loop
RBR:Loop deletion/mutation
1608
1561 EEERKKEESTAASETPEGSQGDSKNAKKKNNKKTNKNKSSISRANKKKPSMPNVSNDLSQ 1620
1621 KLYATMEKHKEVFFVIHLHAGPVISTQPPIVDPDPLLSCDLMDGRDAFLTLARDKHWEFS 1680
1660
B
CBP-FL
GST-CBP1196-1718
460
268
238
163
117
71
55
41
191
97
64
51
39
28
3-8% Tris acetate
coomassie
GST CBP HAT (~86KDa)
4-12% BisTris (MOPS)
C
Input
Flag
CBP-FL
e-Klf6s
(Rep2)
e-Klf6s
(Rep3)
D
Input
Flag
CBP-FL
e-Med13Is
(Rep2)
e-Med13Is
(Rep3)
E
CBP-HAT
Input
GST
wt
Δ1559-1608
Mutant-loop
e-Klf6s
SYBR Gold
Input
Pull-down
GST
wt
Δ1559-1608
Mutant-loop
GST
wt
Δ1559-1608
Mutant-loop
Coomassie
F
eRNA
lncRNA
exon RNA
Input
GST
CBP-HAT-wt
e-Tet2
e-Klf4
e-Klf6
HOTAIR1-300
Gas5
Meg3
Id1 (exon 1)
Bbs2 (exon 1)
Klf2 (exon 3)
G
e-Tet2 e-Klf4 e-Klf6
HOTAIR1-300 Gas5 Meg3
ID-1 Bbs2 Klf2
Foldchange RNA intensity
GST
CBP
H
RNA binding: CBP–HATwt
Fraction RNA bound
[CBP] nM
eMdm2
eMed13l
eKlf6
eYY1
eCcnd1
I
-RNA
0
250
500
1000
2000
4000
6000
8000
10000
[CBP] nM
e-YY1as
e-Klf6s
e-Ccnd1s
J
CBP-HAT wt
1559-RKKEESTAASETPEGSQGDSKNAKKKNNKKTNKNKSSISRANKKK-1608
GST
RBR
1196
1718
CBP-HAT delta-loop
1559
1608
CBP-HAT mutant loop
1559-qeeEEdTAAdEgPEGdeGDdKeAKeeNdKeeaKaKdrIreANeee-1608
K
-RNA
0
250
500
1000
2000
4000
6000
8000
10000
[CBP-HATac] nM
e-YY1as
L
GFP-CBP:
GFP
wt
Δ loop
mutant
IP:GFP
Input
IP
WB:CBP