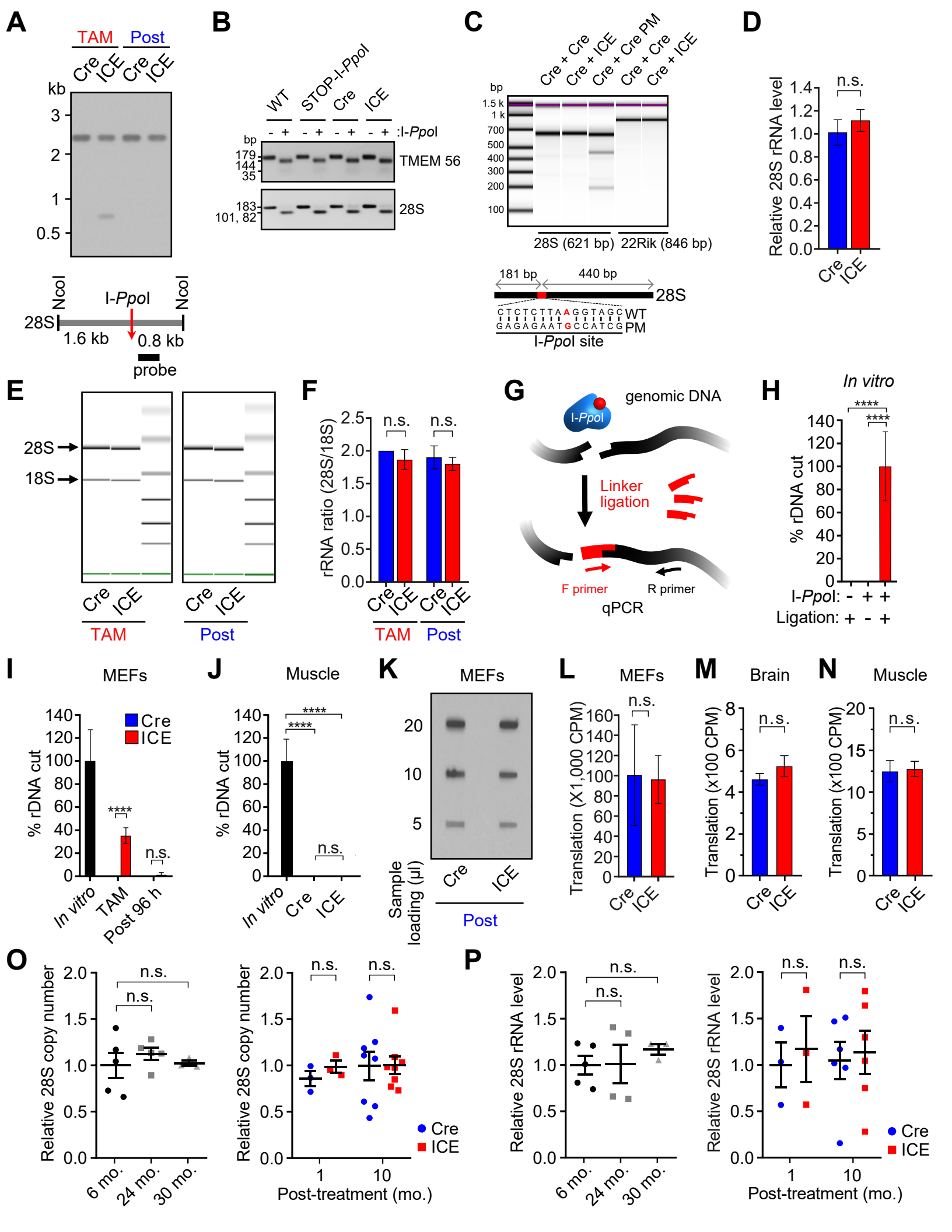
A
TAM
Post
Cre
ICE
Cre
ICE
kb
3
2
1
0.5
NcoI
I-PpoI
NcoI
28S
1.6 kb
0.8 kb
probe
B
WT
STOP-I-PpoI
Cre
ICE
- + - + - + - + :I-PpoI
bp
179
144
35
TMEM 56
183
101, 82
28S
C
Cre + Cre
Cre + ICE
Cre + Cre PM
Cre + Cre
Cre + ICE
bp
1.5 k
1 k
700
500
400
300
200
100
28S (621 bp)
22Rik (846 bp)
181 bp
440 bp
28S
CTCTCTTAAGGTAGC WT
GAGAGAATGCCATCG PM
I-PpoI site
D
n.s.
Relative 28S rRNA level
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Cre
ICE
E
28S
18S
Cre
ICE
Cre
ICE
TAM
Post
F
n.s.
n.s.
rRNA ratio (28S/18S)
2.5
2.0
1.5
1.0
0.5
0.0
Cre
ICE
Cre
ICE
TAM
Post
G
genomic DNA
I-PpoI
Linker ligation
F primer
R primer
qPCR
H
In vitro
****
****
% rDNA cut
140
120
100
80
60
40
20
0
I-PpoI: - + +
Ligation: + - +
I
MEFs
Cre
ICE
% rDNA cut
140
120
100
80
60
40
20
0
****
n.s.
In vitro
TAM
Post 96 h
J
Muscle
****
****
% rDNA cut
140
120
100
80
60
40
20
0
n.s.
In vitro
Cre
ICE
K
MEFs
20
10
5
Sample loading (µl)
Cre
ICE
Post
L
MEFs
n.s.
Translation (X1,000 CPM)
160
140
120
100
80
60
40
20
0
Cre
ICE
M
Brain
n.s.
Translation (x100 CPM)
8
6
4
2
0
Cre
ICE
N
Muscle
n.s.
Translation (x100 CPM)
20
15
10
5
0
Cre
ICE
O
n.s.
n.s.
Relative 28S copy number
2.0
1.5
1.0
0.5
0.0
6 mo.
24 mo.
30 mo.
n.s.
n.s.
Relative 28S copy number
2.0
1.5
1.0
0.5
0.0
Cre
ICE
1
10
Post-treatment (mo.)
P
n.s.
n.s.
Relative 28S rRNA level
2.0
1.5
1.0
0.5
0.0
6 mo.
24 mo.
30 mo.
n.s.
n.s.
Relative 28S rRNA level
2.0
1.5
1.0
0.5
0.0
Cre
ICE
1
10
Post-treatment (mo.)