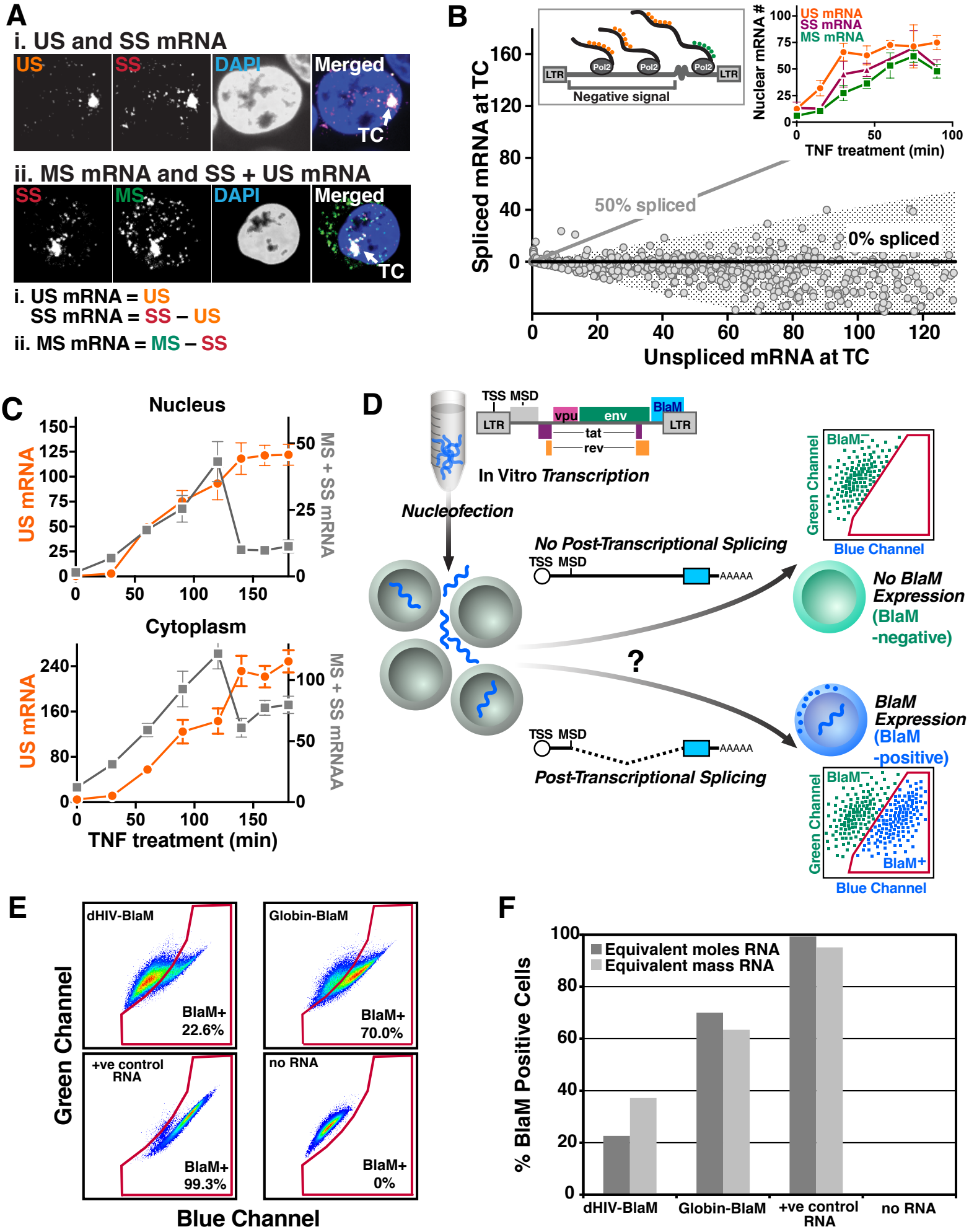
A
i. US and SS mRNA
US
SS
DAPI
Merged
TC
ii. MS mRNA and SS + US mRNA
SS
MS
DAPI
Merged
TC
i. US mRNA = US
SS mRNA = SS – US
ii. MS mRNA = MS – SS
B
Spliced mRNA at TC
Unspliced mRNA at TC
LTR
Pol2
Negative signal
Nuclear mRNA #
US mRNA
SS mRNA
MS mRNA
TNF treatment (min)
50% spliced
0% spliced
C
Nucleus
US mRNA
MS + SS mRNA
Cytoplasm
MS + SS mRNAA
TNF treatment (min)
D
TSS MSD
LTR
vpu
env
BlaM
tat
rev
In Vitro Transcription
Nucleofection
No Post-Transcriptional Splicing
AAAAA
Post-Transcriptional Splicing
?
No BlaM Expression (BlaM -negative)
BlaM Expression (BlaM -positive)
Green Channel
Blue Channel
BlaM–
BlaM+
E
dHIV-BlaM
BlaM+ 22.6%
Globin-BlaM
BlaM+ 70.0%
+ve control RNA
BlaM+ 99.3%
no RNA
BlaM+ 0%
Green Channel
Blue Channel
F
% BlaM Positive Cells
Equivalent moles RNA
Equivalent mass RNA
dHIV-BlaM
Globin-BlaM
+ve control RNA
no RNA