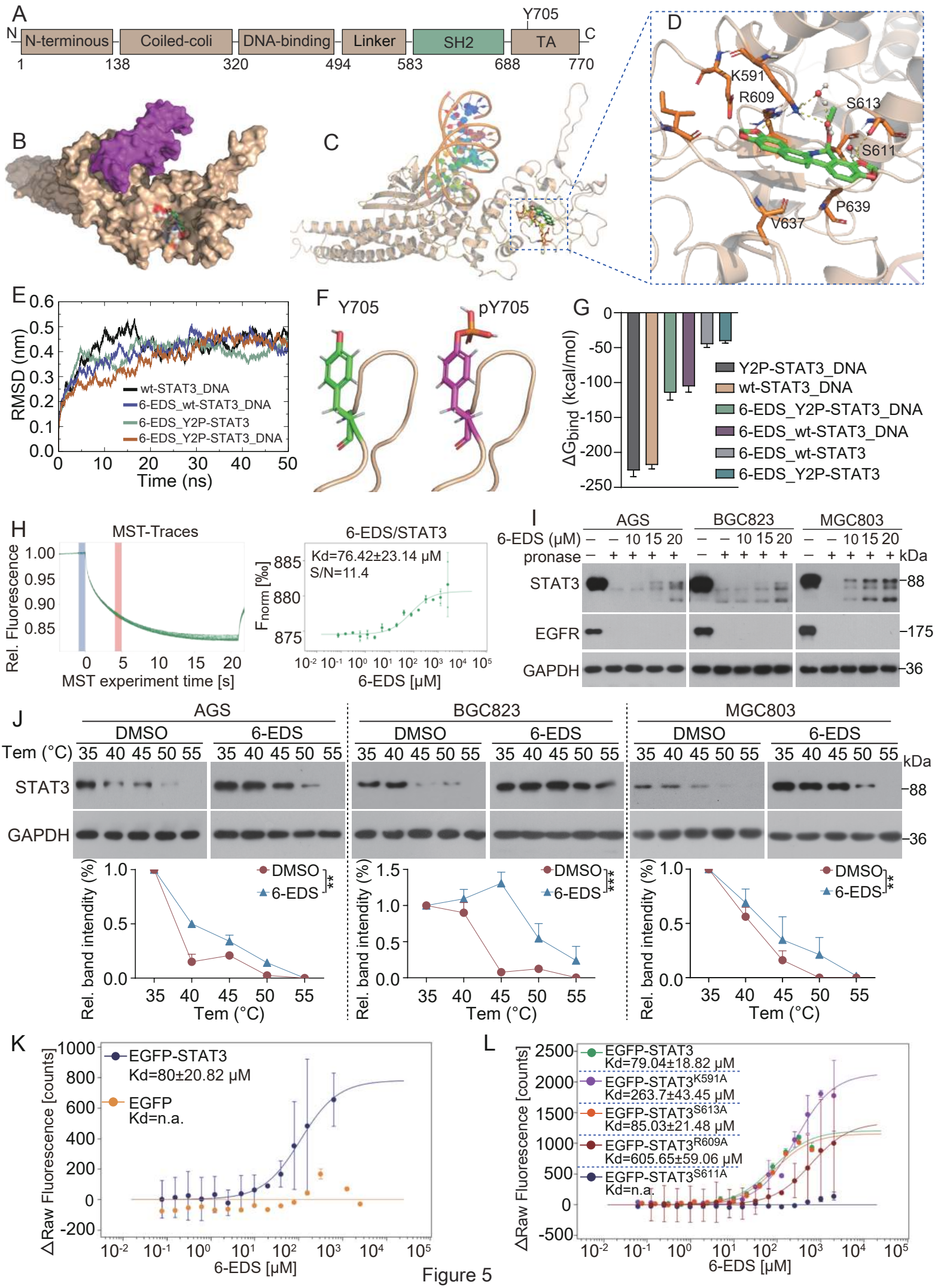
A
N
N-terminous
Coiled-coli
DNA-binding
Linker
SH2
Y705
TA
C
1
138
320
494
583
688
770
B
C
D
K591
R609
S613
S611
P639
V637
E
RMSD (nm)
Time (ns)
wt-STAT3_DNA
6-EDS_wt-STAT3_DNA
6-EDS_Y2P-STAT3
6-EDS_Y2P-STAT3_DNA
F
Y705
pY705
G
ΔGbind (kcal/mol)
Y2P-STAT3_DNA
wt-STAT3_DNA
6-EDS_Y2P-STAT3_DNA
6-EDS_wt-STAT3_DNA
6-EDS_wt-STAT3
6-EDS_Y2P-STAT3
H
MST-Traces
Rel. Fluorescence
MST experiment time [s]
6-EDS/STAT3
Kd=76.42±23.14 μM
S/N=11.4
Fnorm [‰]
6-EDS [μM]
I
AGS
BGC823
MGC803
6-EDS (μM)
pronase
kDa
STAT3
EGFR
GAPDH
88
175
36
J
AGS
BGC823
MGC803
DMSO
6-EDS
Tem (°C)
STAT3
GAPDH
kDa
88
36
Rel. band intendity (%)
Tem (°C)
K
EGFP-STAT3
Kd=80±20.82 μM
EGFP
Kd=n.a.
ΔRaw Fluorescence [counts]
6-EDS [μM]
L
EGFP-STAT3
Kd=79.04±18.82 μM
EGFP-STAT3K591A
Kd=263.7±43.45 μM
EGFP-STAT3S613A
Kd=85.03±21.48 μM
EGFP-STAT3R609A
Kd=605.65±59.06 μM
EGFP-STAT3S611A
Kd=n.a.
ΔRaw Fluorescence [counts]
6-EDS [μM]

Figure 5