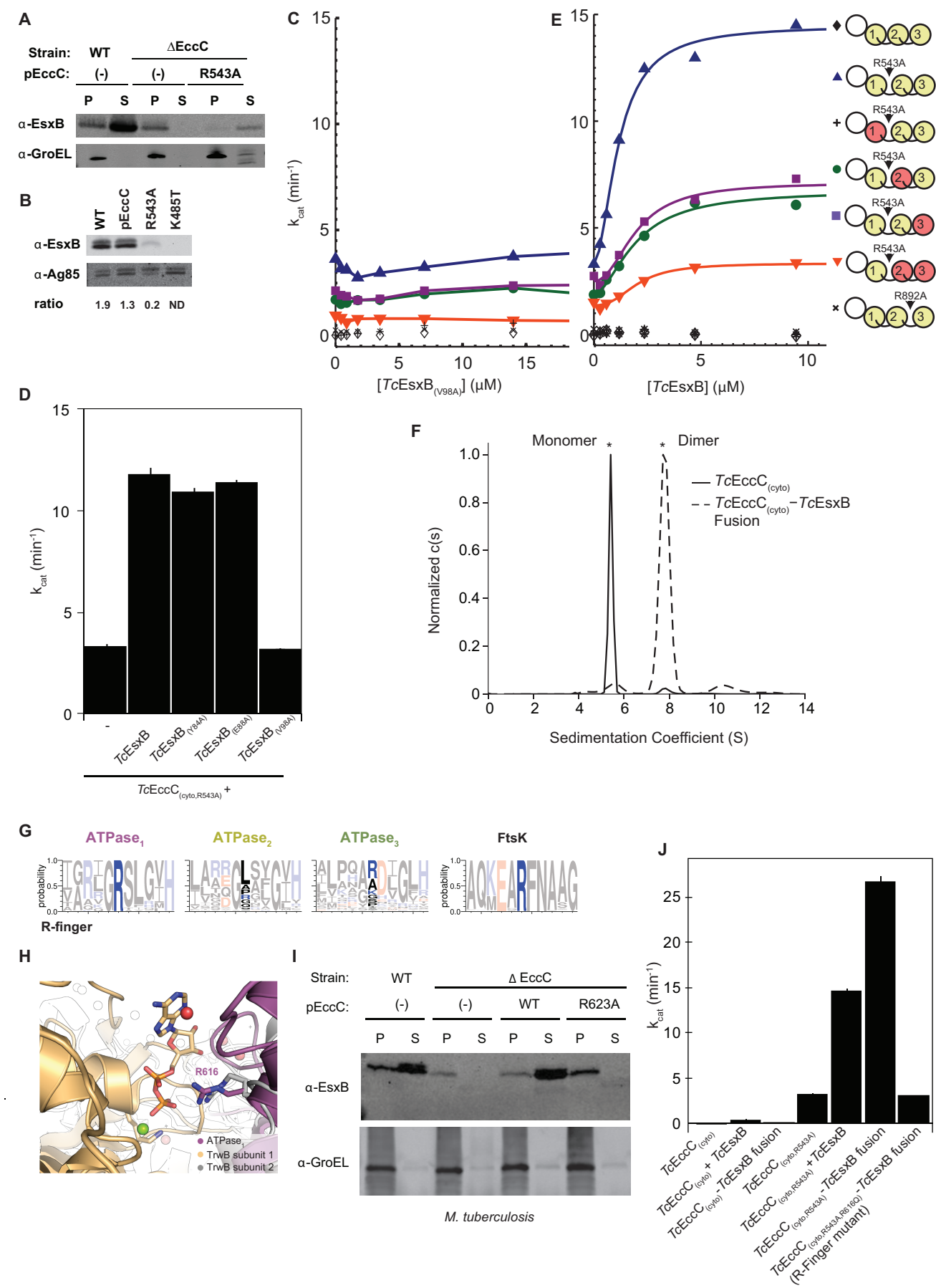
A
Strain: WT ΔEccC
pEccC: (-) (-) R543A
P S P S P S
α-EsxB
α-GroEL
B
WT pEccC R543A K485T
α-EsxB
α-Ag85
ratio 1.9 1.3 0.2 ND
C
k_{cat} (min^{-1})
[TcEsxB$_{(V98A)}$] (μM)
E
[TcEsxB] (μM)
R543A
R892A
D
k_{cat} (min^{-1})
-
TcEsxB
TcEsxB$_{(Y84A)}$
TcEsxB$_{(E88A)}$
TcEsxB$_{(V98A)}$
TcEccC$_{(cyto,R543A)}$ +
F
Monomer
Dimer
TcEccC$_{(cyto)}$
TcEccC$_{(cyto)}$–TcEsxB Fusion
Normalized c(s)
Sedimentation Coefficient (S)
G
ATPase$_1$
ATPase$_2$
ATPase$_3$
FtsK
probability
R-finger
H
R616
ATPase$_1$
TrwB subunit 1
TrwB subunit 2
I
Strain: WT Δ EccC
pEccC: (-) (-) WT R623A
P S P S P S P S
α-EsxB
α-GroEL
M. tuberculosis
J
k_{cat} (min^{-1})
TcEccC$_{(cyto)}$
TcEccC$_{(cyto)}$ + TcEsxB
TcEccC$_{(cyto)}$-TcEsxB fusion
TcEccC$_{(cyto,R543A)}$
TcEccC$_{(cyto,R543A)}$ +TcEsxB
TcEccC$_{(cyto,R543A)}$-TcEsxB fusion
TcEccC$_{(cyto,R543A,R616Q)}$-TcEsxB fusion (R-Finger mutant)