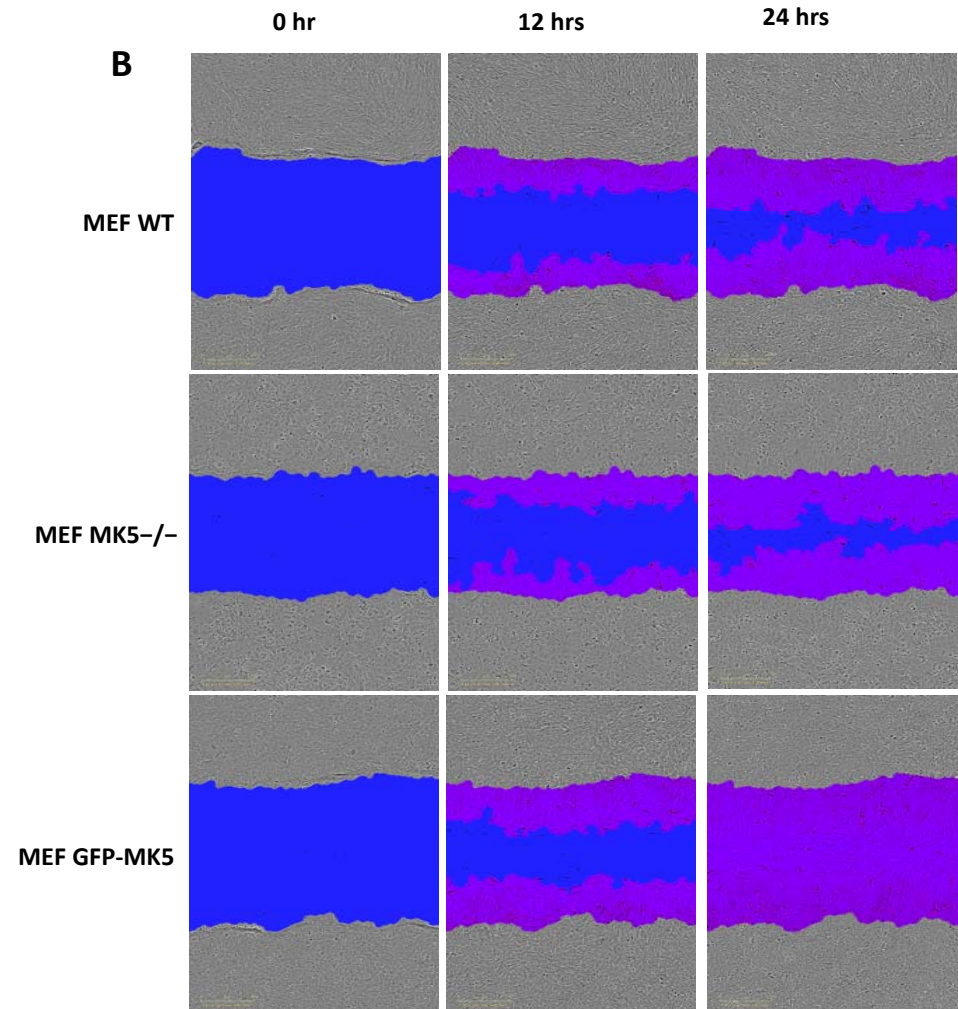
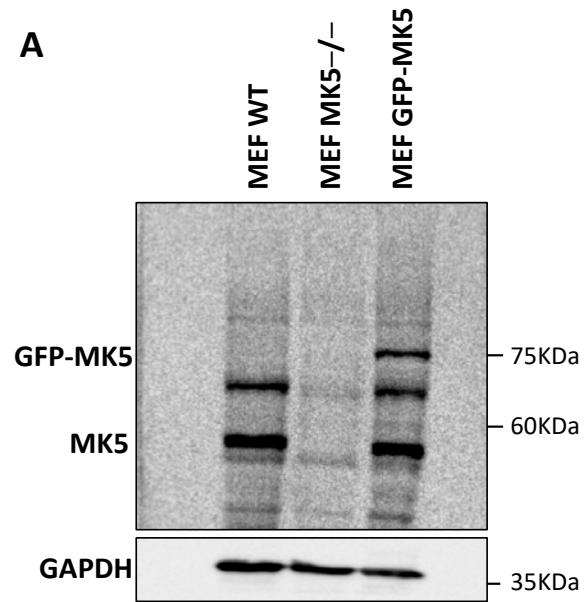
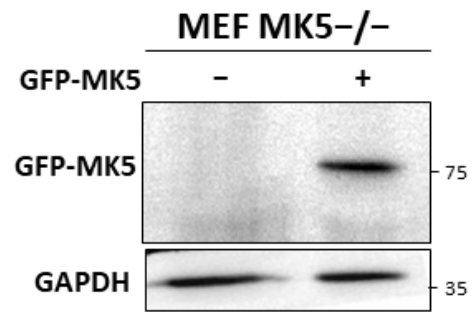


## Supplementary Figure: S1

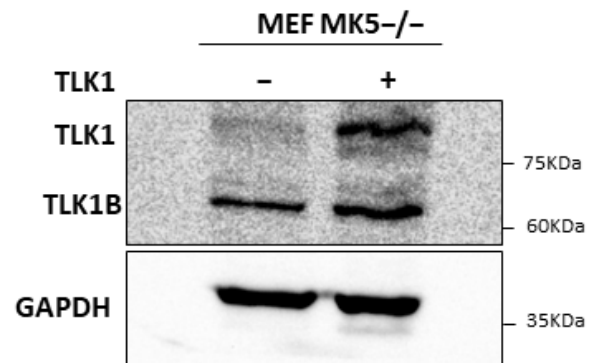


Supplementary Figure: S2

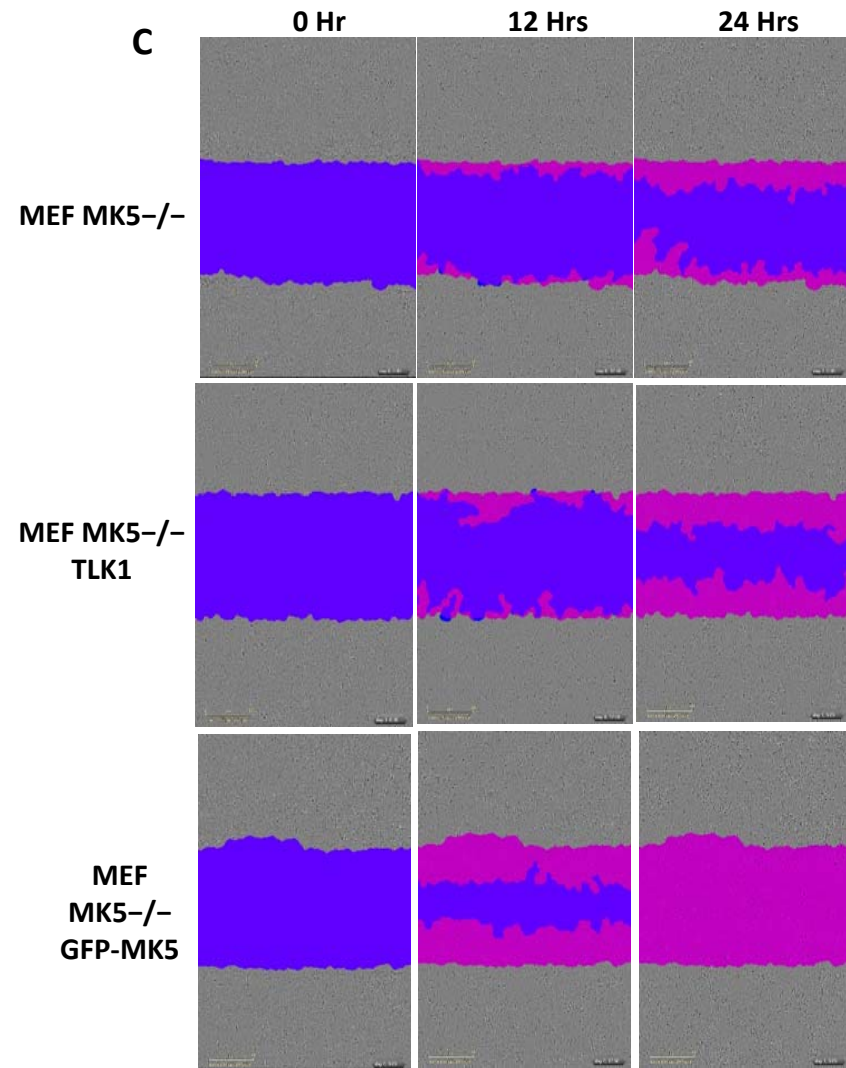
A



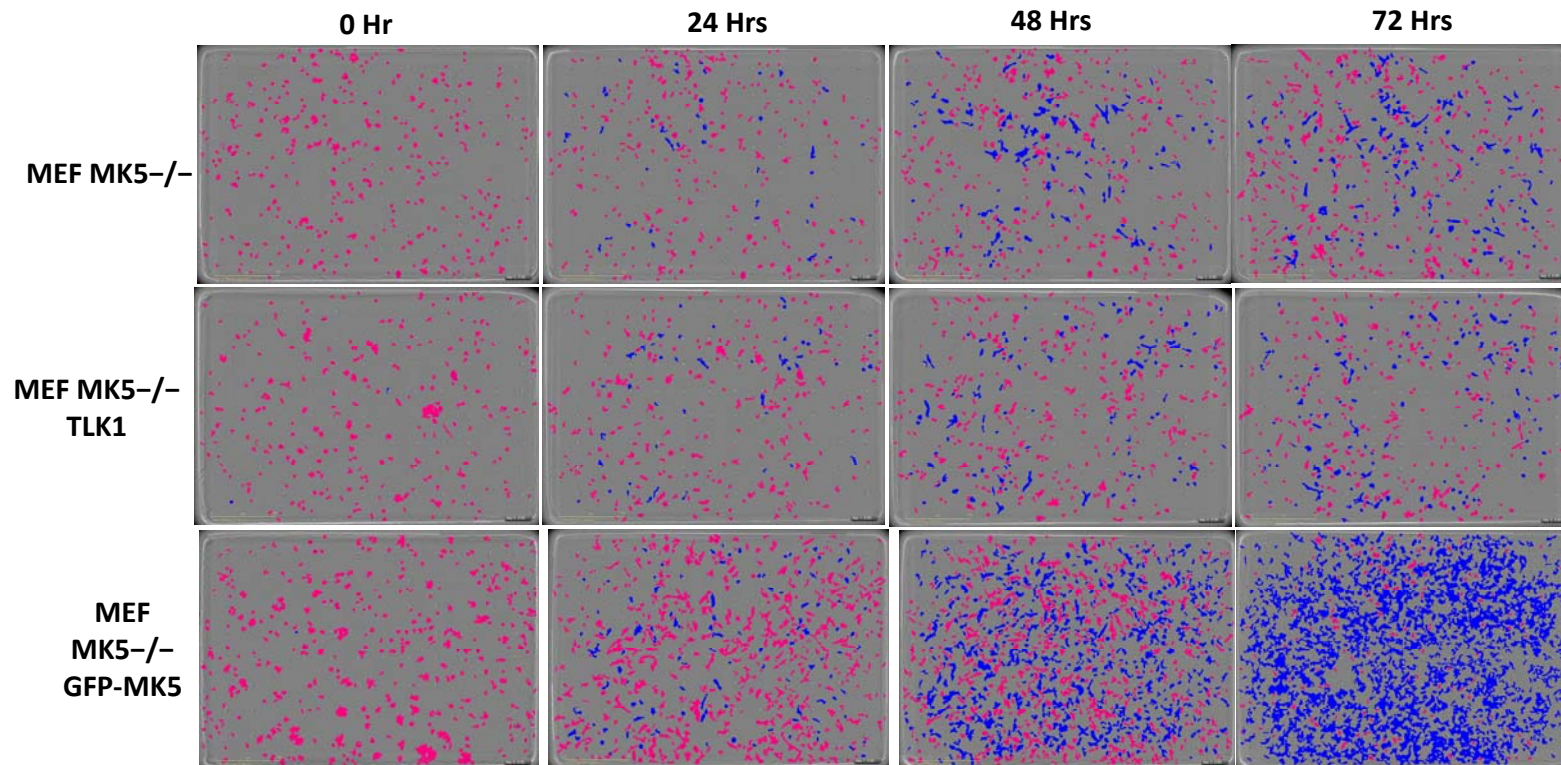
B



C

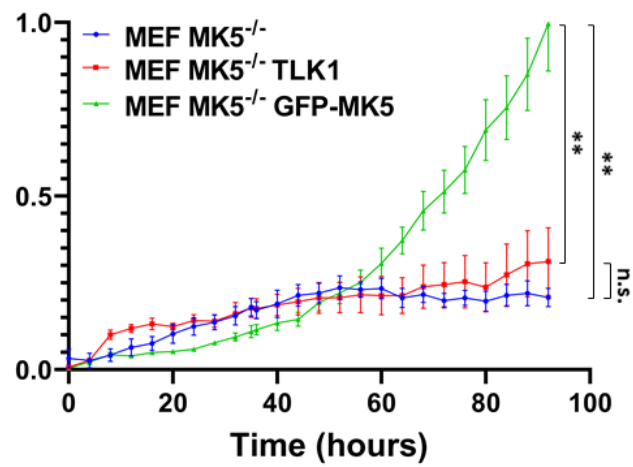


### Supplementary Figure: S3

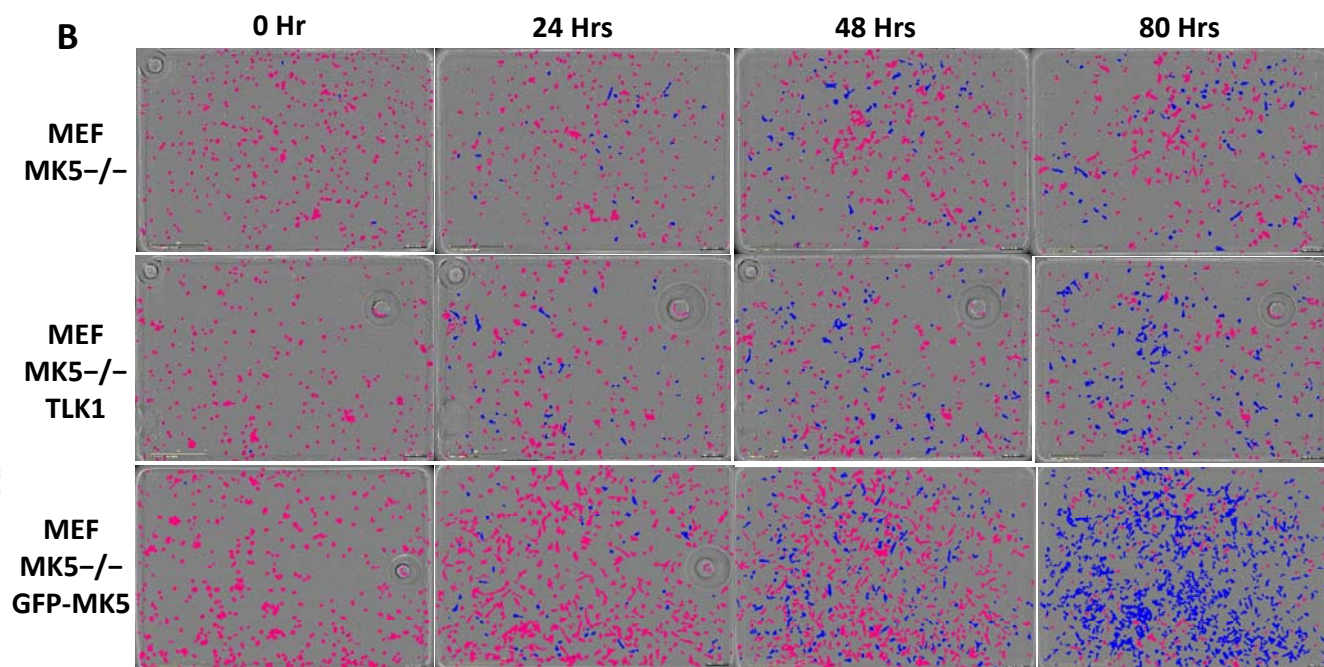


### Supplementary Figure: S4

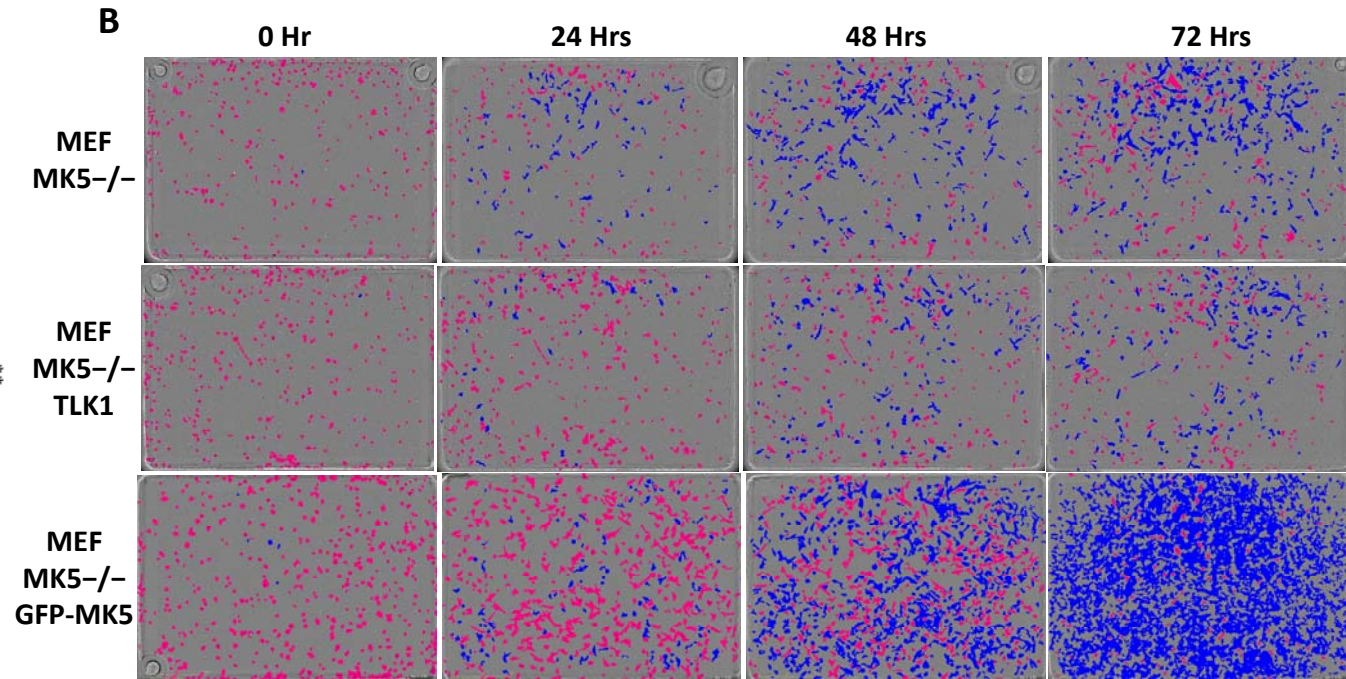
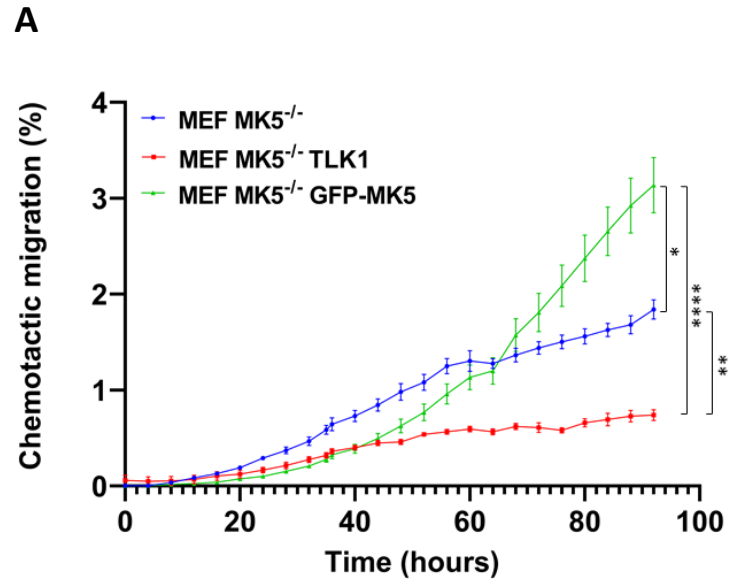
**A**



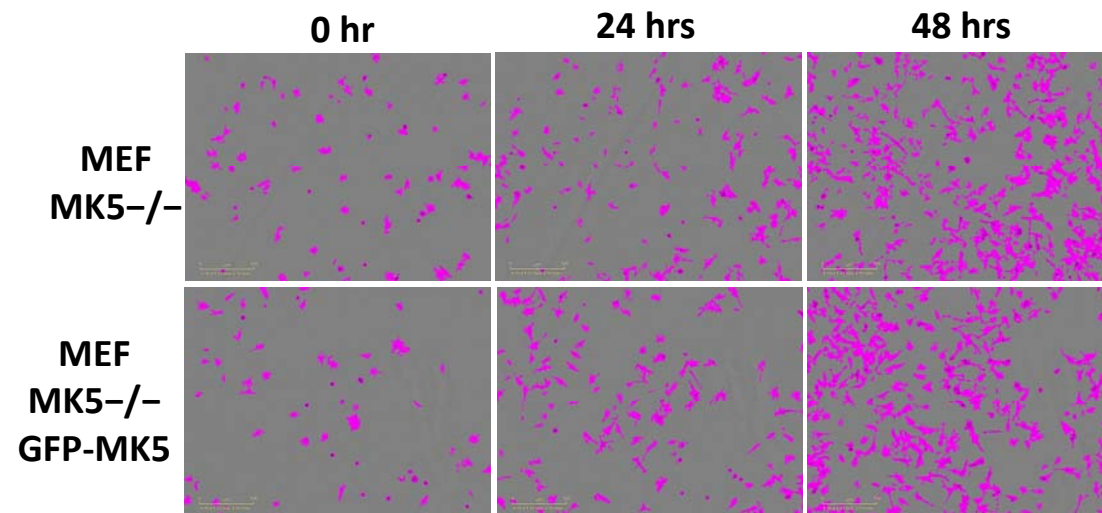
**B**



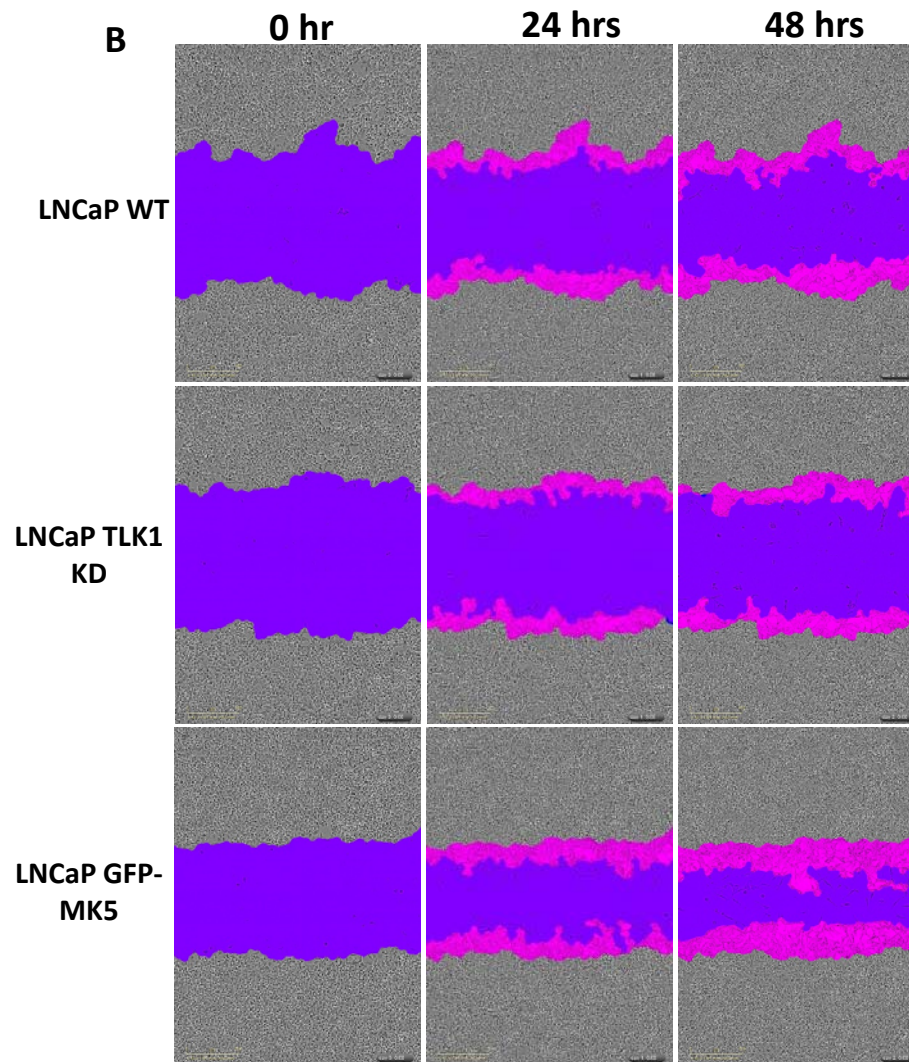
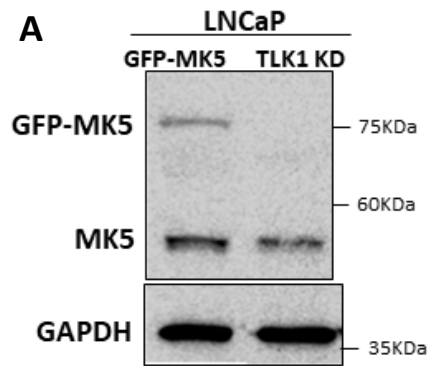
### Supplementary Figure: S5



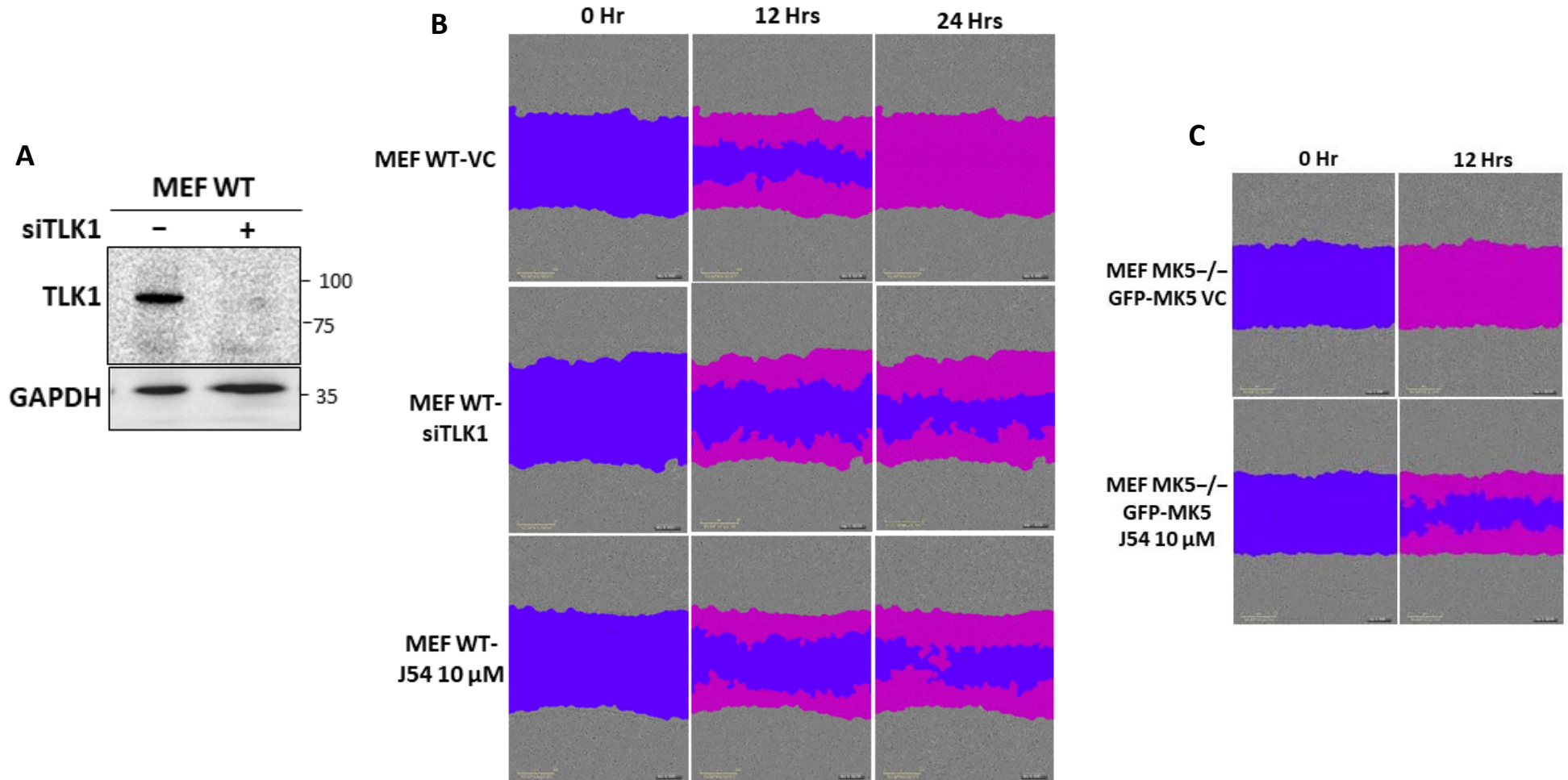
Supplementary Figure: S6



Supplementary Figure: S7

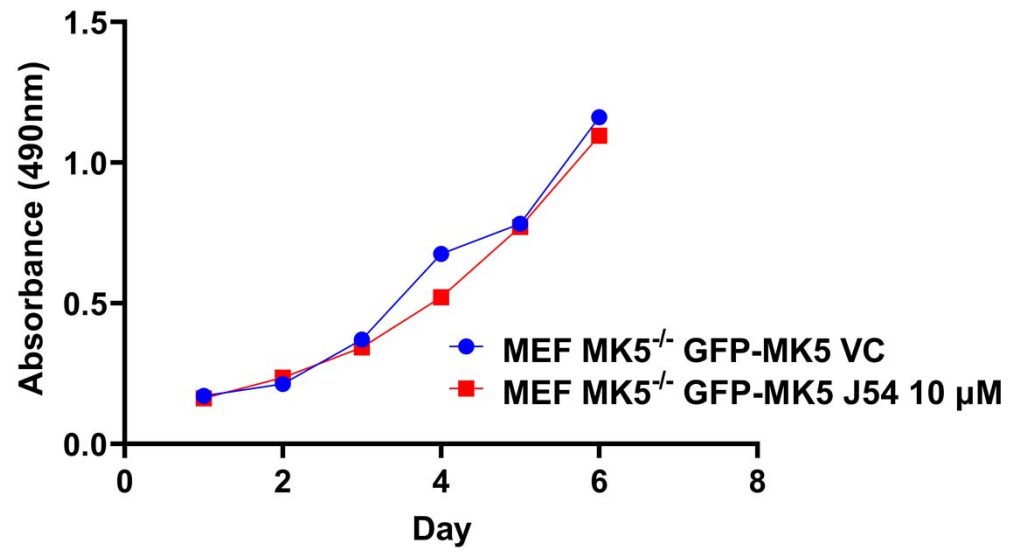


### Supplementary Figure: S8

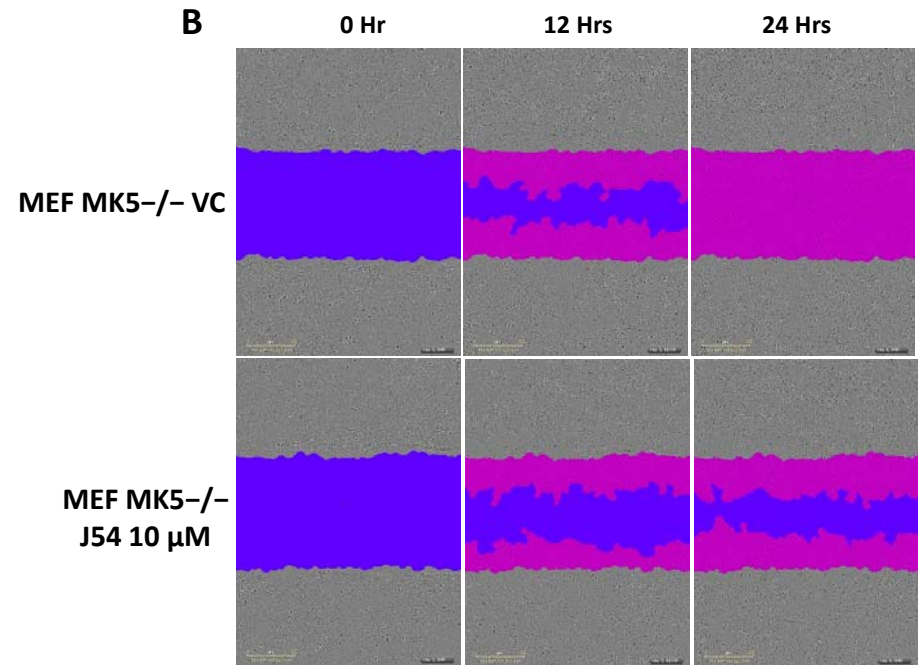
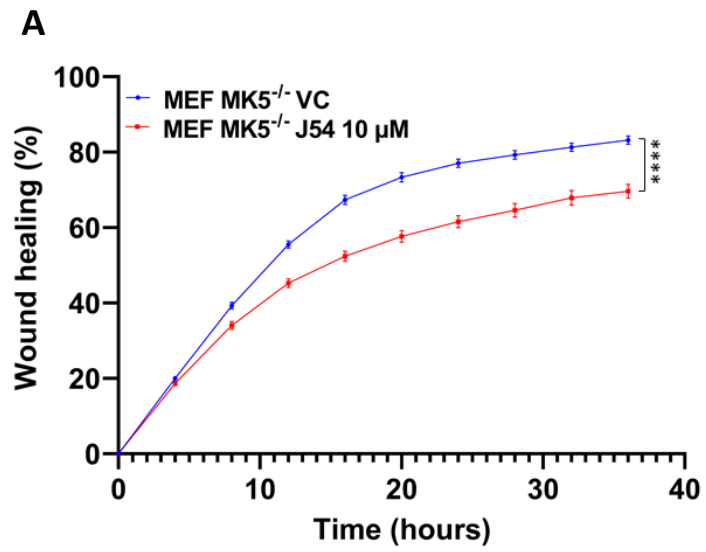




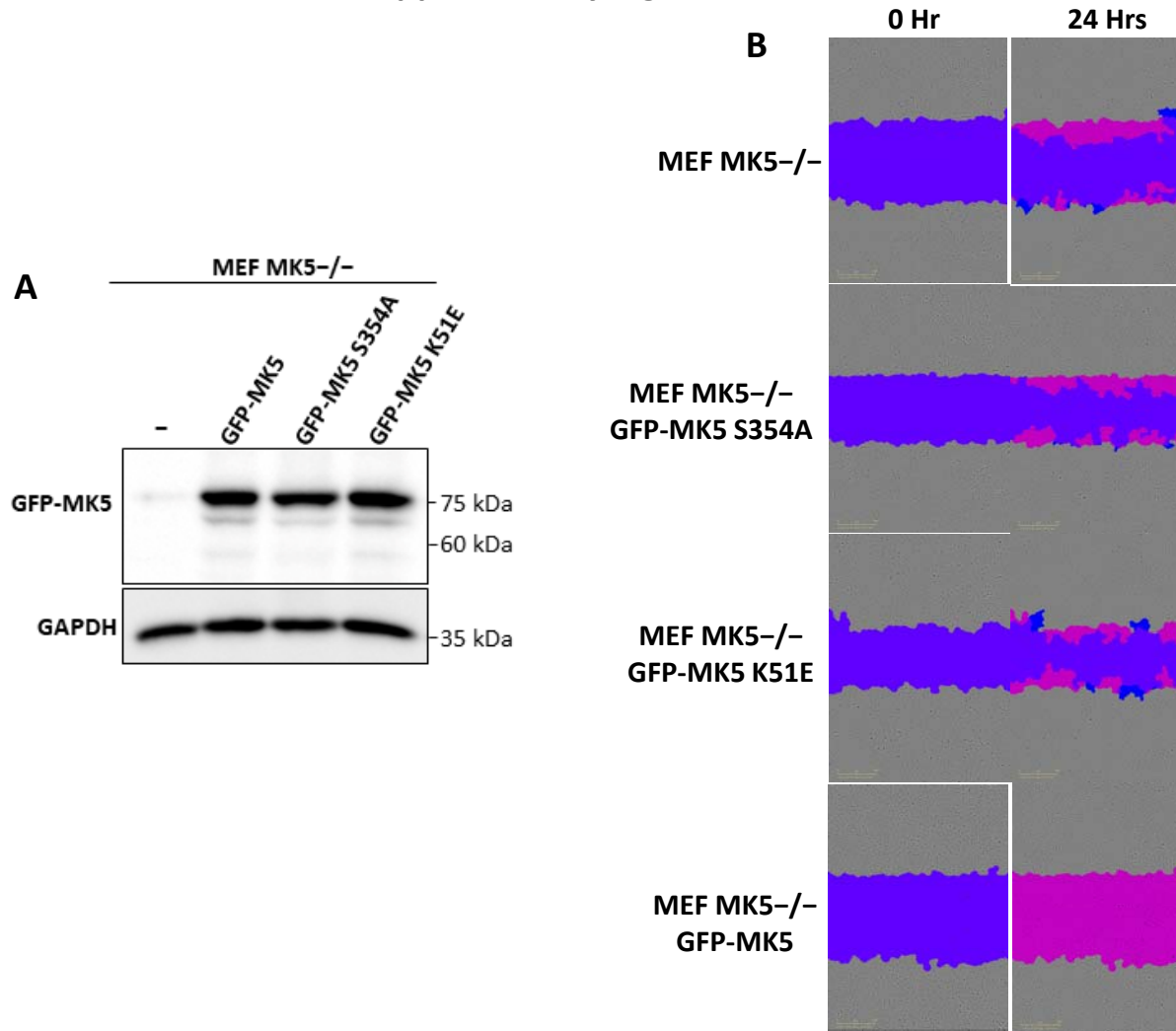
Supplementary Figure: S9



### Supplementary Figure: S10

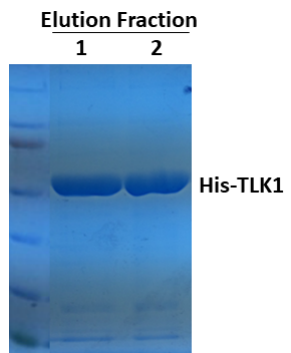


### Supplementary Figure: S11

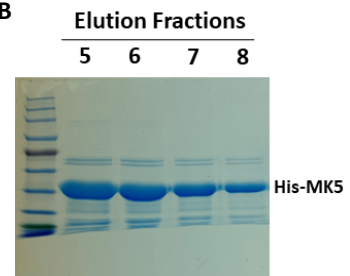


## Supplementary Figure: S12

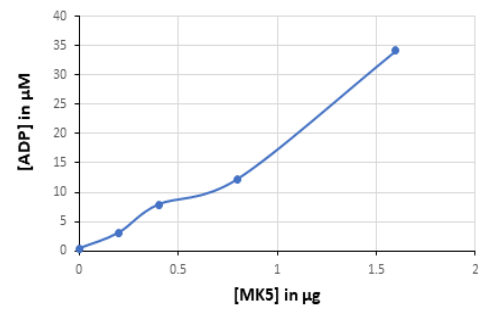
**A**



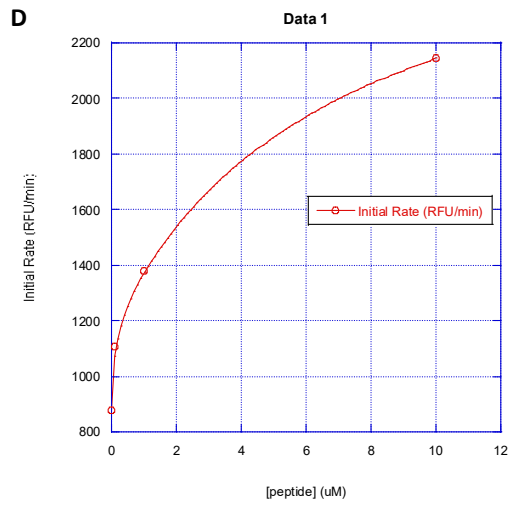
**B**



**C**

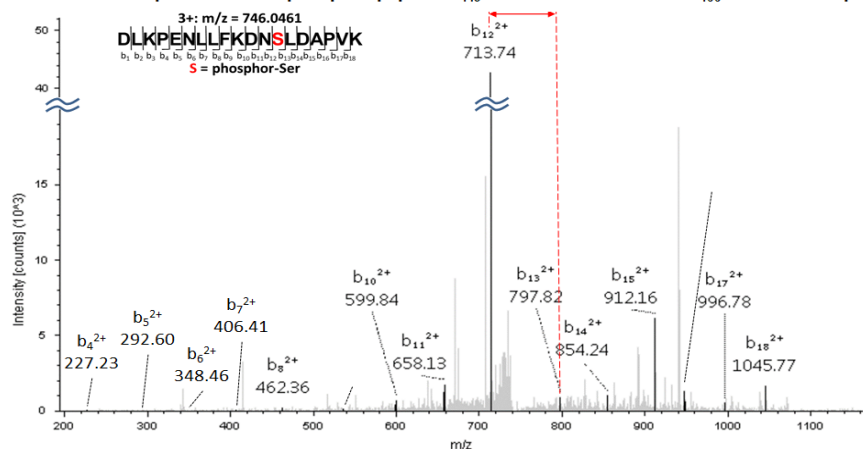


**D**

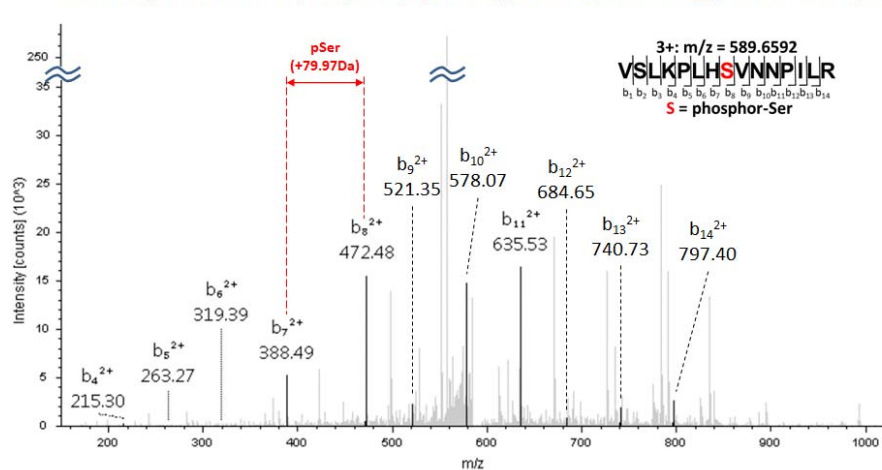


## Supplementary Figure: S13

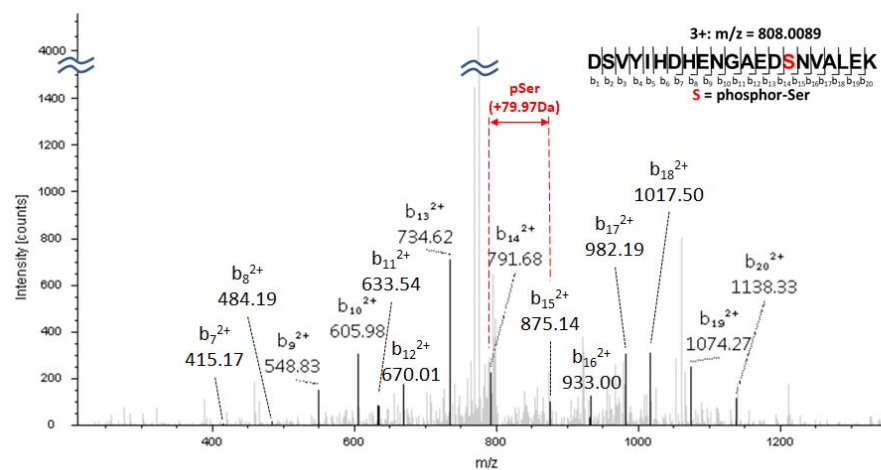
**A** MS/MS spectrum of the phosphor-peptide  $D_{148}$ LKPENLLFKD**S**LDAPVK $_{166}$  to determine pS160



**B** MS/MS spectrum of the phosphor-peptide  $V_{347}$ SLKPLH**S**VNNPILR $_{362}$  to determine pS354

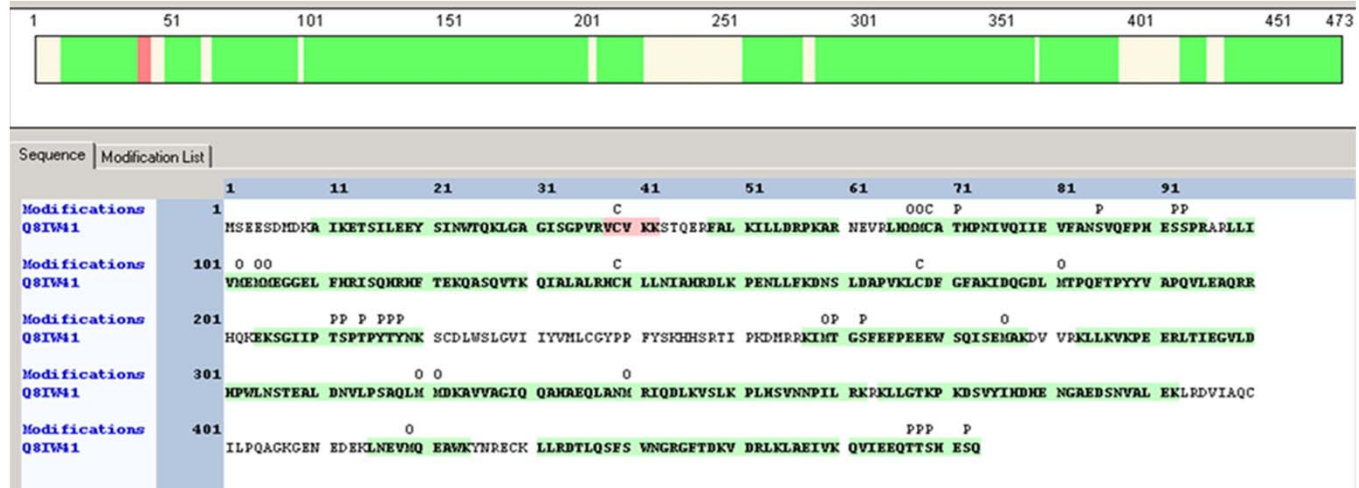


**C** MS/MS spectrum of the phosphor-peptide  $D_{372}$ SVYIHDH**S**ENGAEDSNVALEK $_{392}$  to determine pS386



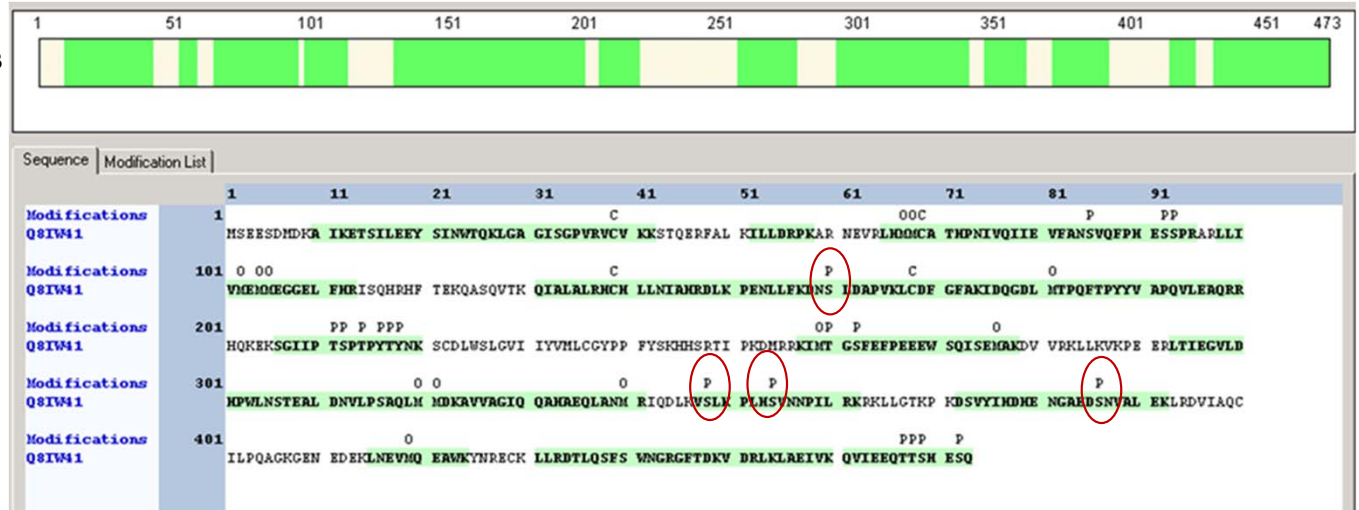
## Supplementary Figure: S14

MK5-  
Control

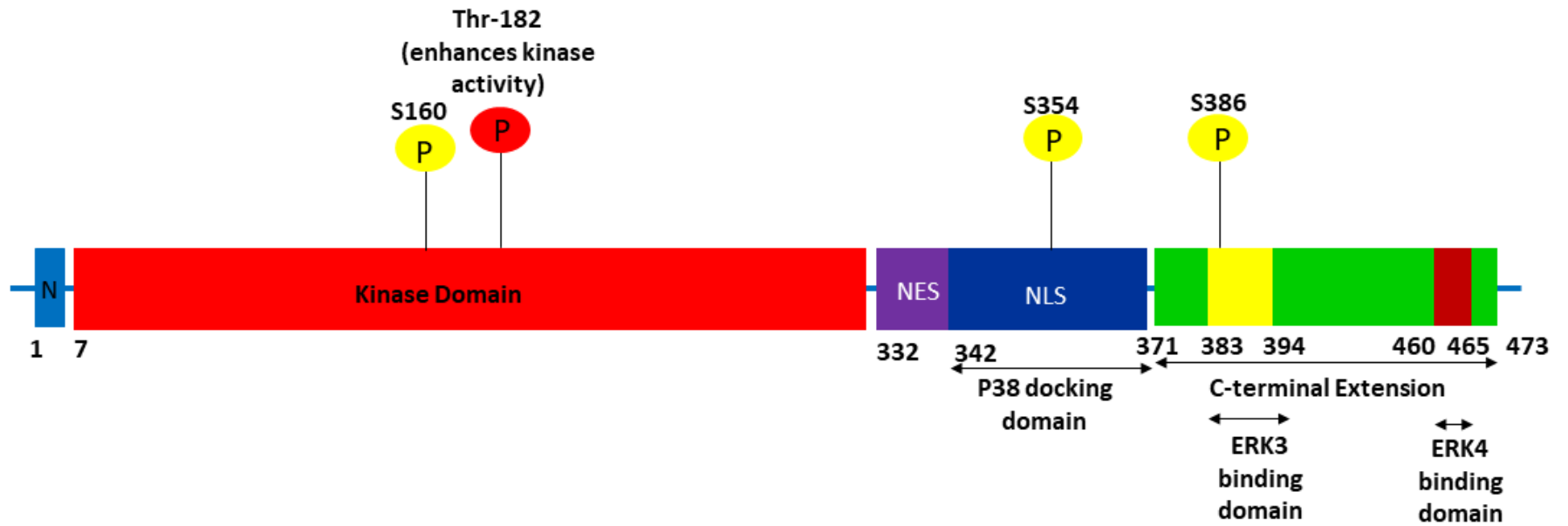


New phosphorylated sites detected in MK5-plus sample are marked with red circles.

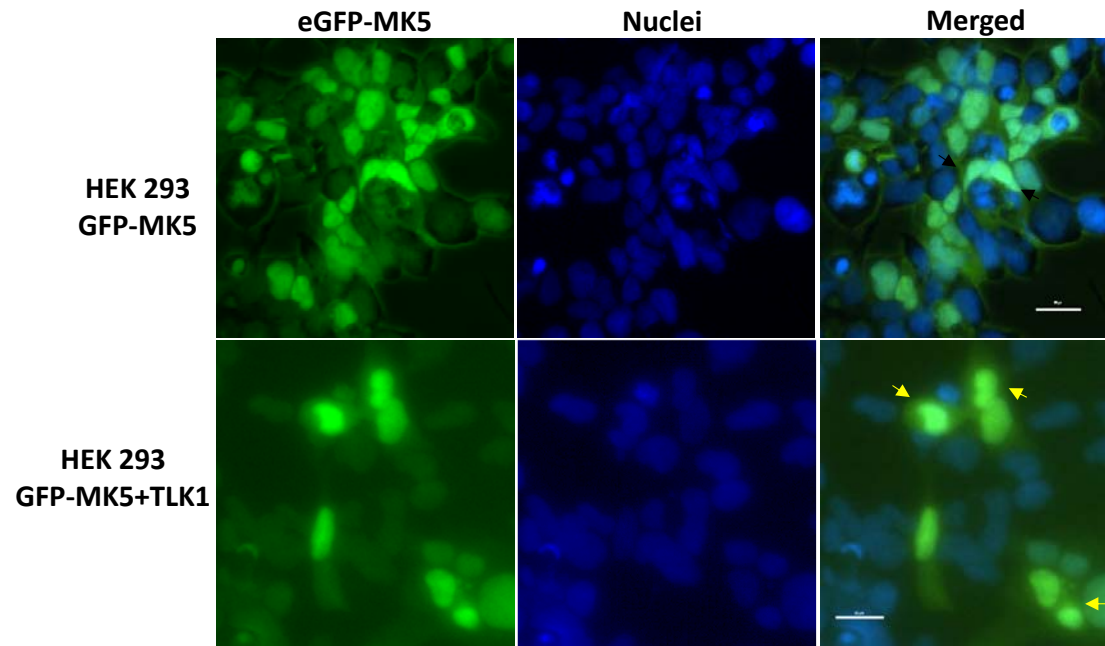
MK5+TLK1B



Supplementary Figure: S15

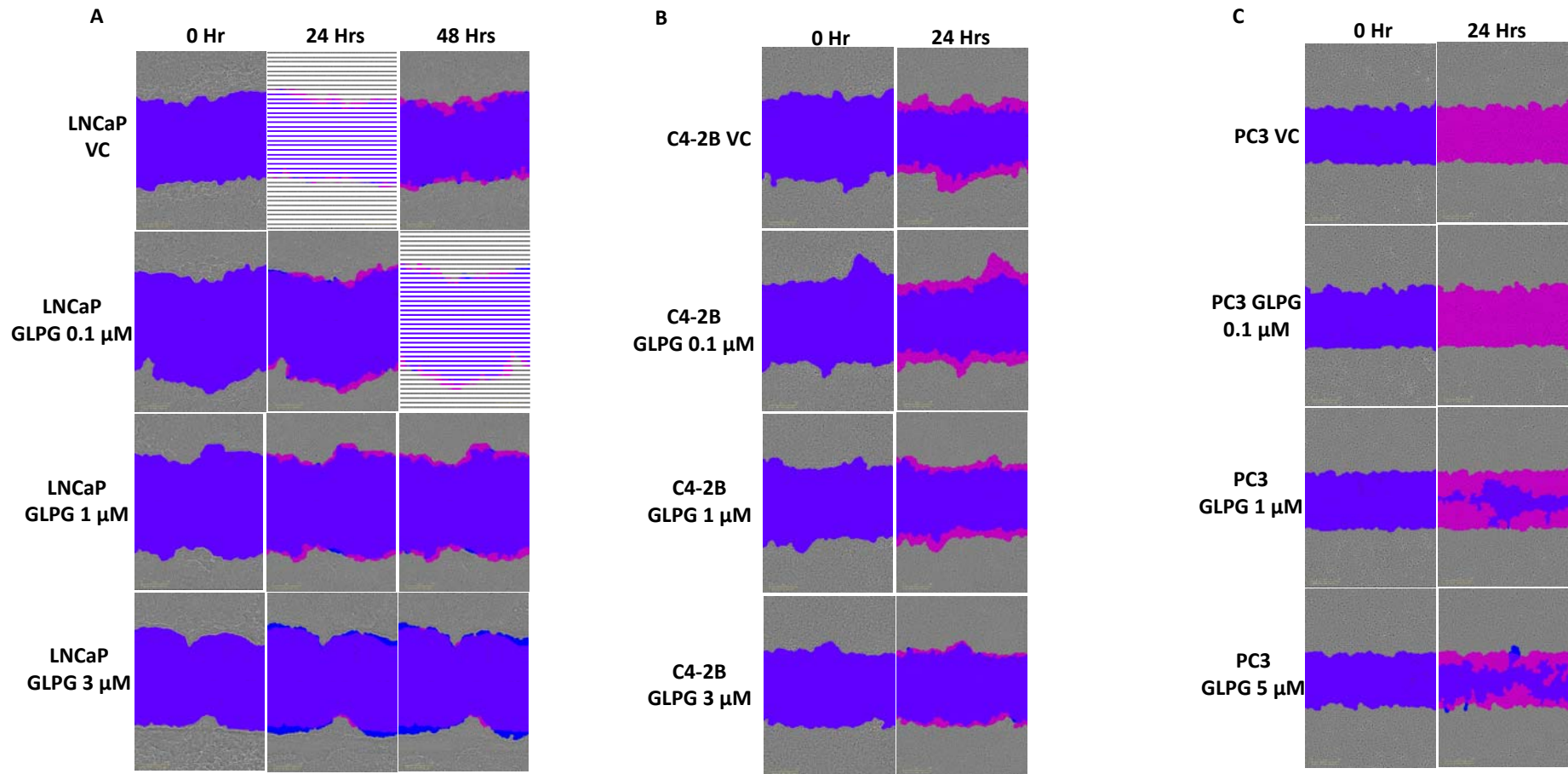


Supplementary Figure: S16

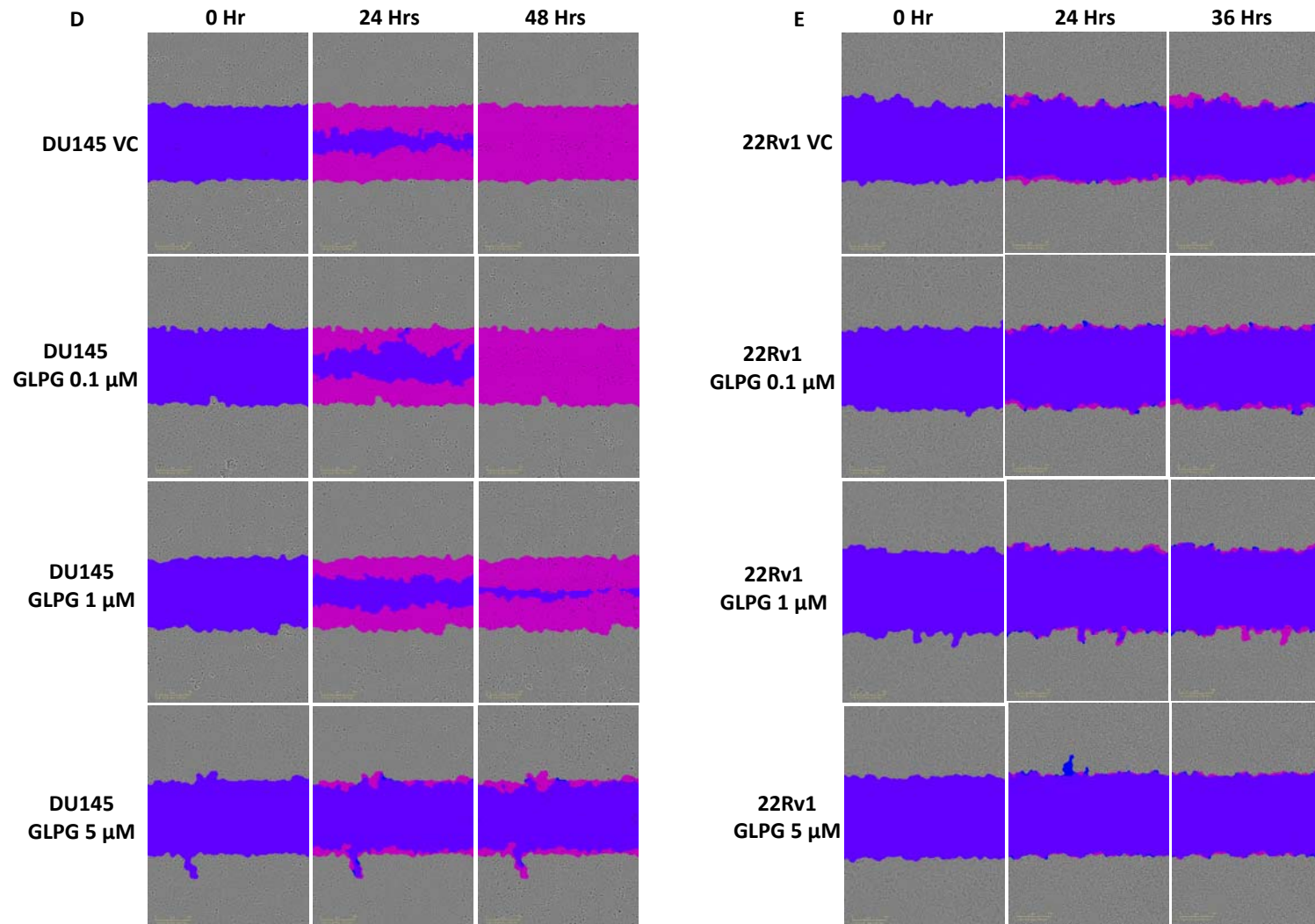




### Supplementary Figure: S17



### Supplementary Figure: S17 (continued)



# Supplementary Figure: S18

## Effect of TLK1 expression level & Gleason score on PRAD patient survival

