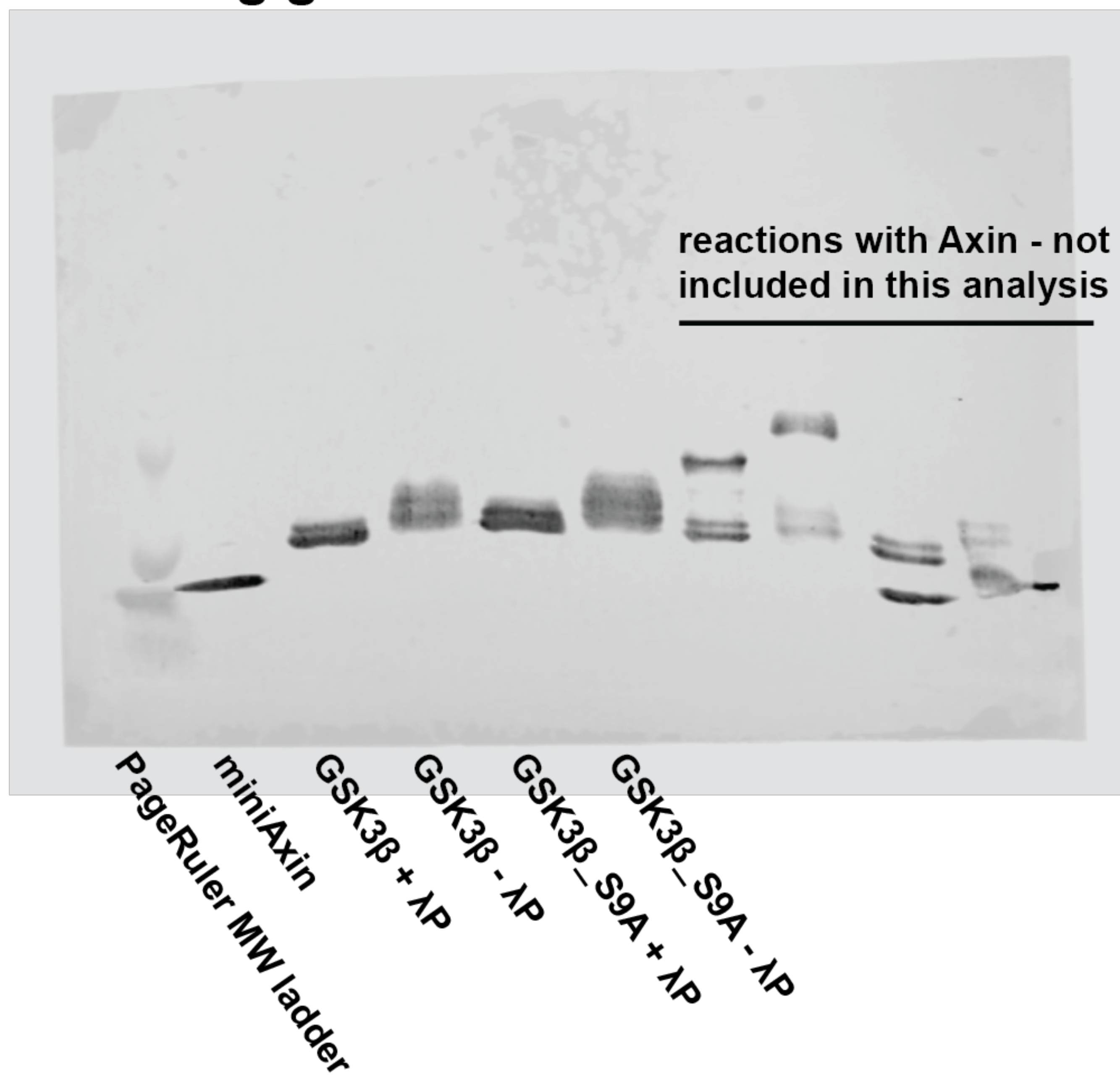
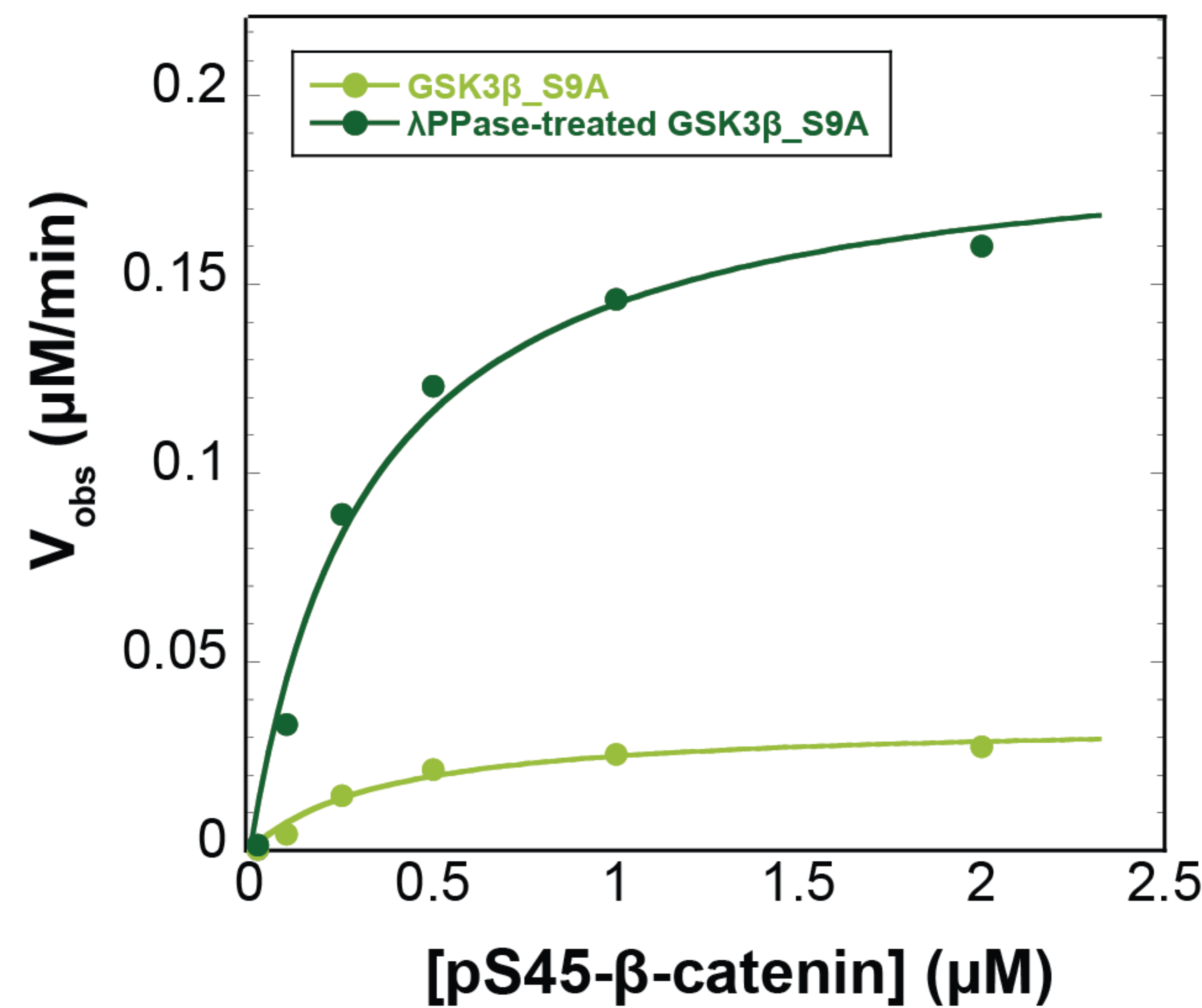


A)

Phos-tag gel



B)



C)

GSK3 β phosphorylation state affects kinase activityRecombinantly
expressed λ PPase
treatedPKA
treatedFold-change
in $k_{\text{cat}}/K_{\text{M}}$ GSK3 β
(pY216)
+ other phosphosites

~5x increase

GSK3 β
(pY216)

~200x decrease

pS9-GSK3 β
(pY216)

no effect

no effect

~200x increase

GSK3 β _S9A
(pY216)
+ other phosphosites

~5x increase

GSK3 β _S9A
(pY216)

no effect

GSK3 β _S9A
(pY216)