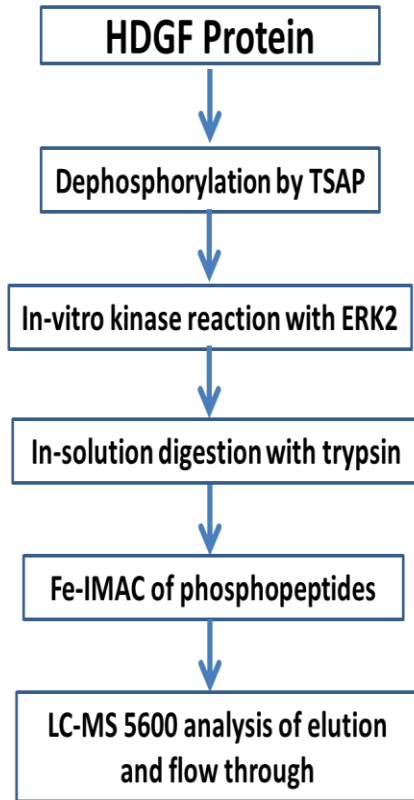


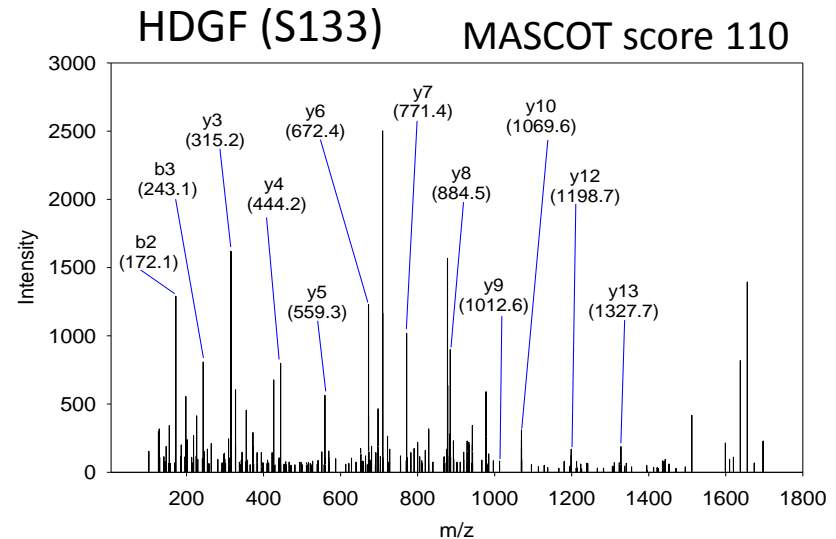
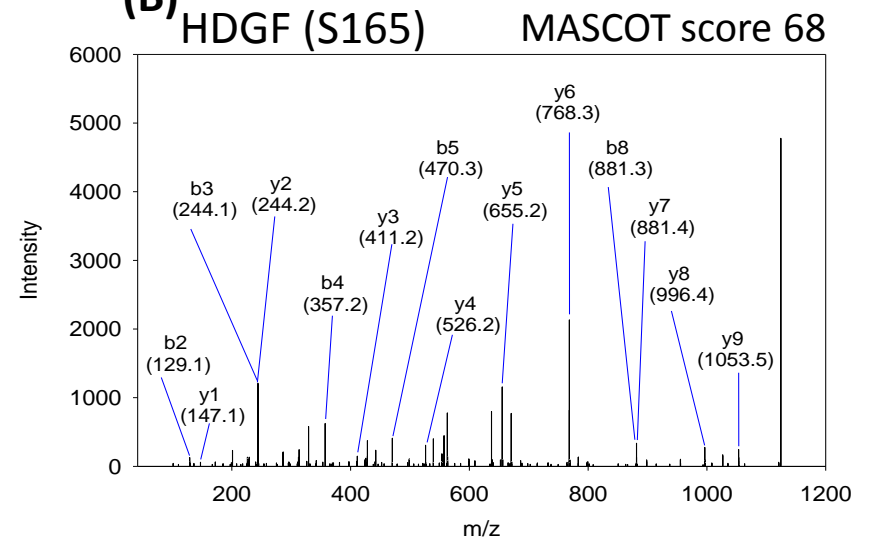
**Supplementary Figure 1.** Western blot validation of HDGF protein expression in tissue sample. N: normal tissue sample. T : tumor tissue sample.

(A)

## Protein Level Phosphorylation Workflow



(B)



**Supplementary Figure 2 (A)** Workflow to perform in vitro kinase reaction for HDGF at protein level **(B)** MS/MS spectra of phosphopeptides S165 (AGDLLDpSPK, m/z = 562.7) and S133 (GNAEGSpSDEEGKLVIDEPAK, m/z = 709.0)