

Supplementary Figure 1. 2-dimensional immunoblot analysis of PAK1, PAK1/2/3 and P-PAK1/2/3 levels in four different human MM cell lines.

Supplementary Figure 2. Immunoblot analysis of MM cells (Me12) treated with siRNA against PAK1 and PAK2 revealing that the slower migrating band is PAK1 and the faster migrating band is PAK2.

Supplementary Figure 3. IHC analysis of murine MM tissues with the P-PAK1,2,3 (Ser 141) antibody with and without pre-treatment with lambda phosphatase (λ PPtase).

Supplementary Figure 4. Expression of PID inhibits PAK phosphorylation, cell viability (MTS assay) and G418-resistant colony formation in Meso-17 cells.

Supplemental Figure 5. MTS assays of ME12 and Meso 22 cells treated with 0, 10, 20, 30, 40, 50, 60 and 70 μ M PIR3.5 compound after 72 hours of treatment.

Supplementary Figure 6. Immunoblot analysis of P-PAK1/2/3, total PAK1/2/3, P-AKT, AKT, P-ERK1/2, ERK1/2 and β -actin levels 24-hr post-nucleofection of pcDNA or pcDNA-PID in Me12 cells (*left panels*); pcDNA and increasing concentrations of pcDNA-PID in Meso 22 cells (*right panels*).

Supplementary Figure 7. Reverse-phase antibody array of phospho-kinases in Meso 22 cells treated with DMSO or IPA-3 (*left panels*) or nucleofected with pcDNA or pcDNA-PID (*right panels*) for 24 hours.

