



Supplemental Figure Legend:

Supplemental Figure 1. Cellular morphology following culture of **A**, WT Shp2-expressing, **B**, Shp2D61Y-expressing, **E**, Stat3 wild type (Stat3^{t/f}), and **F**, Stat3-/- (Stat3^{t/f}; bTie2-cre) lineage negative murine bone marrow cells (isolated using SpinSep protocol, Stem Cell Technologies) in mast cell media (IL-3 10 U/mL) for two weeks; **C** and **G**, showing flow cytometry analysis for Mac-1, comparing WT Shp2 to Shp2D61Y in (**C**) and Stat3 wild type cells and Stat3^{-/-} cells in (**G**) ; **D** and **H**, F4/80, comparing WT Shp2 to Shp2D61Y in (**D**) and Stat3 wild type cells and Stat3^{-/-} cells in (**H**).