LIST OF FIGURES

Figure 6.2.2B: Graphical representation showing average number of puncta/field in HD150Q cells after different concentrations of Kinetin with/without Ponasterone A for 24 hours

Figure 6.2.3A: 40X Fluorescence microscopic images showing GFP tagged mHTT aggregates in HD150Q cells after different concentrations of Kinetin with/without Ponasterone A for 48 hours.

Figure 6.2.3B: Graphical representation showing average number of puncta/field in HD150Q cells after different concentrations of Kinetin with/without Ponasterone A for 48 hours.

Figure 6.2.4: (A) Western Blot image and **(B)** Graphical representation for densitometric analysis showing mHTT aggregates in HD150Q cells after different concentrations of Kinetin with/without Ponasterone A for 24 hours.

Figure 6.2.4: (C) Western Blot image and **(D)** Graphical representation for densitometric analysis showing mHTT aggregates in HD150Q cells after different concentrations of Kinetin with/without Ponasterone A for 48 hours.

Figure 6.2.5A: 40X Fluorescence microscopic images showing GFP tagged mHTT aggregates in HD150Q cells after Ponasterone A with/without different concentrations of BMS 345541 and Bay 11-7082 for 48 hours.

Figure 6.2.5B: Graphical representation showing Average number of puncta/field in HD150Q cells after Ponasterone A with/without different concentrations of BMS 345541 and Bay 11-7082 for 48 hours.

Figure 6.2.6: (A) Western Blot image and **(B)** Graphical representation for densitometric analysis showing mHTT aggregates and soluble HTT expression in HD150Q cells after Ponasterone A with/without different concentrations of BMS 345541 for 48 hours.

Figure 6.2.6: (C) Western Blot image and **(D)** Graphical representation for densitometric analysis showing mHTT aggregates and soluble HTT expression in HD150Q cells after Ponasterone A with/without different concentrations of Bay 11-7082 for 48 hours.

Figure 6.3.1: Graphical representation of normalized ATP levels in HD150Q cells after different concentrations of Kinetin with/without Ponasterone A obtained through ATP determination kit.

Figure 6.3.2: Expression profile of some of the key mitochondrial genes (*Pgc1α* and *Nrf1*) and *Bdnf* obtained through RT-qPCR.

Figure 6.3.3A: 40X Fluorescence microscopic images showing mitochondrial ROS levels using MitoSOX Red in HD150Q cells after Ponasterone A treatment for 24, 48, 72 and 96 hours, respectively.

Figure 6.3.3B: Graphical representation showing % fluorescence intensity of MitoSOX Red in HD150Q cells after Ponasterone A treatment for 24, 48, 72 and 96 hours, respectively.

Figure 6.3.3C: 40X Fluorescence microscopic images showing mitochondrial ROS levels using MitoSOX Red in HD150Q cells after different concentrations of Kinetin with/without Ponasterone A for 24 and 48 hours.

Figure 6.3.3D: Graphical representation showing % fluorescence intensity of MitoSOX Red in HD150Q cells after treatment of Kinetin with/without Ponasterone A for 24 and 48 hours.

Figure 6.3.4: Graphical representation of normalized ATP levels in HD150Q cells after Ponasterone A with/without different concentrations of **(A)** BMS 345541 and **(B)** Bay 11-7082 for 24 hours.

Figure 6.3.5: Expression profile of some of the key mitochondrial genes (*Pgc1α* and *Nrf1*) and *Bdnf* after Ponasterone A with/without BMS 345541 and Bay 11-7082 treated HD150Q cells for 24 hours obtained through RT-qPCR.

Figure 6.3.6A: 40X Fluorescence microscopic images showing mitochondrial ROS levels using MitoSOX Red in HD150Q cells after Ponasterone A with/without different concentrations of BMS 345541 and Bay 11-7082 for 48 hours.

Figure 6.3.6B: Graphical representation showing % fluorescence intensity of MitoSOX Red in HD150Q cells after Ponasterone A with/without different concentrations of BMS 345541 and Bay 11-7082 for 48 hours.

Figure 6.4.1: Expression profile of some of the crucial genes involved in ER stress in HD150Q cells after treatment of Kinetin with/without Ponasterone A obtained through RT-qPCR.

Figure 6.4.2: Western Blot image showing some of the key proteins involved in ER stress in HD150Q cells after different concentrations of Kinetin with/without Ponasterone A treatment for 24 and 48 hours.

CHAPTER 8