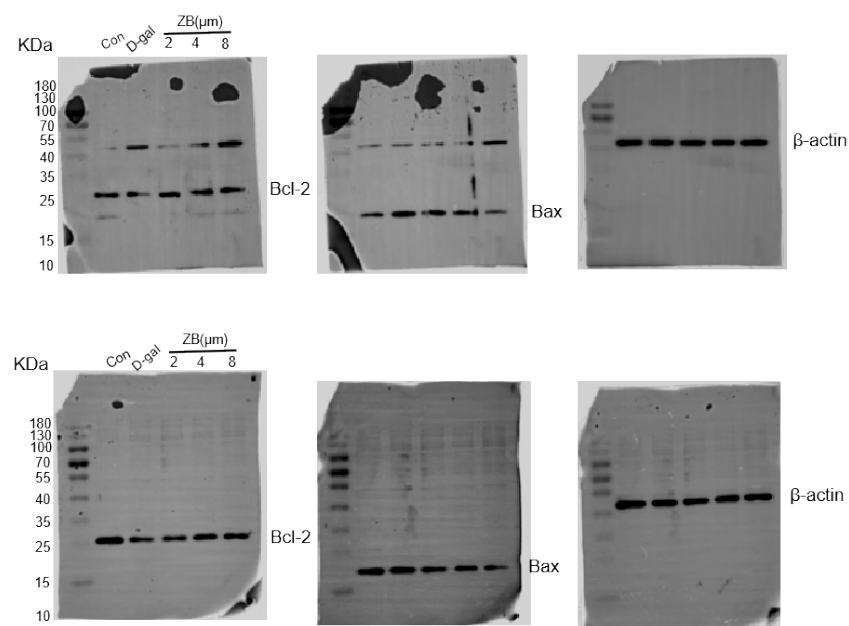
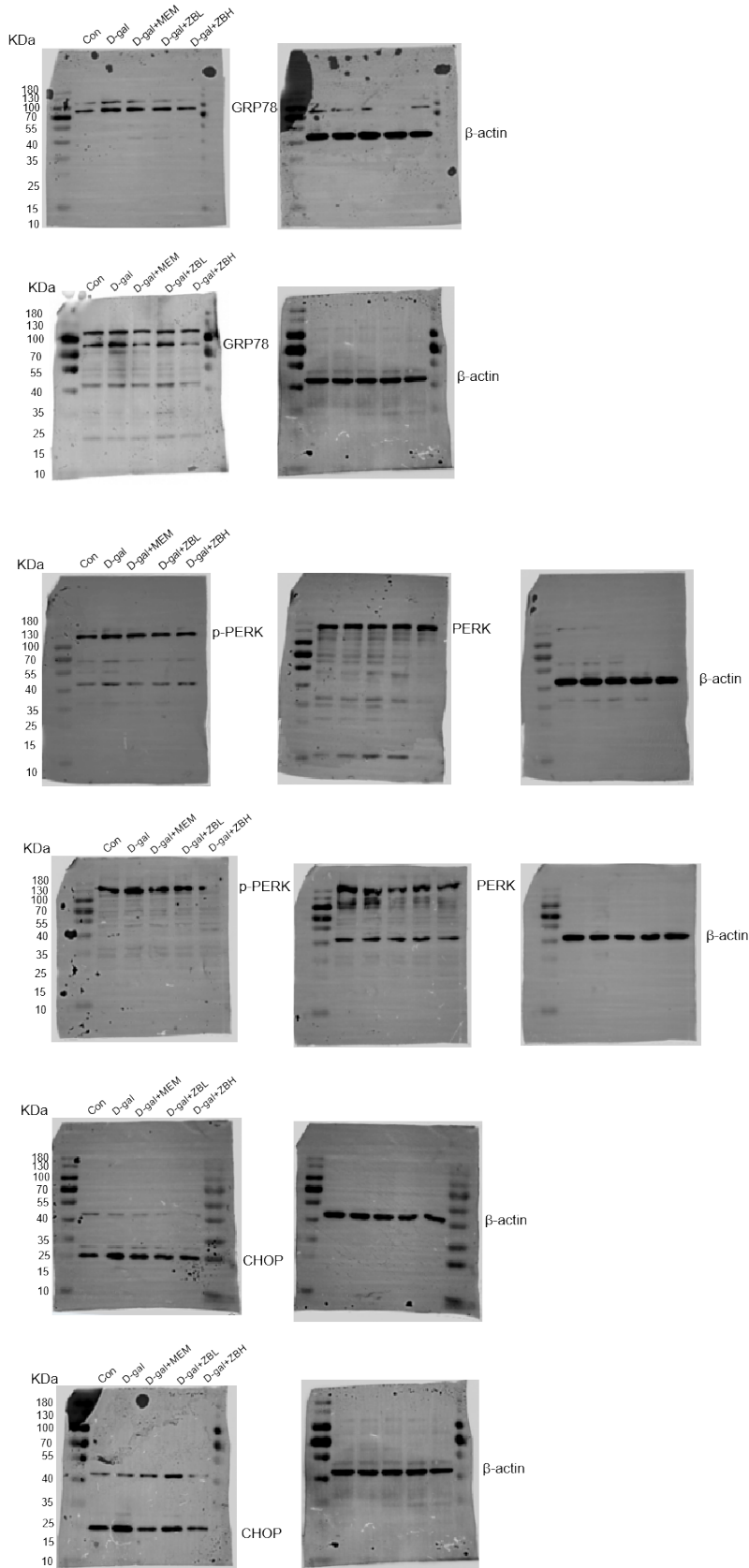


**Fig.3. Zerumbone alleviated D-gal-induced neuronal apoptosis and oxidative damage in vitro.**

Repetitive Western blotting images of Bcl-2 and Bax protein in D-gal-induced SH-SY5Y cells.

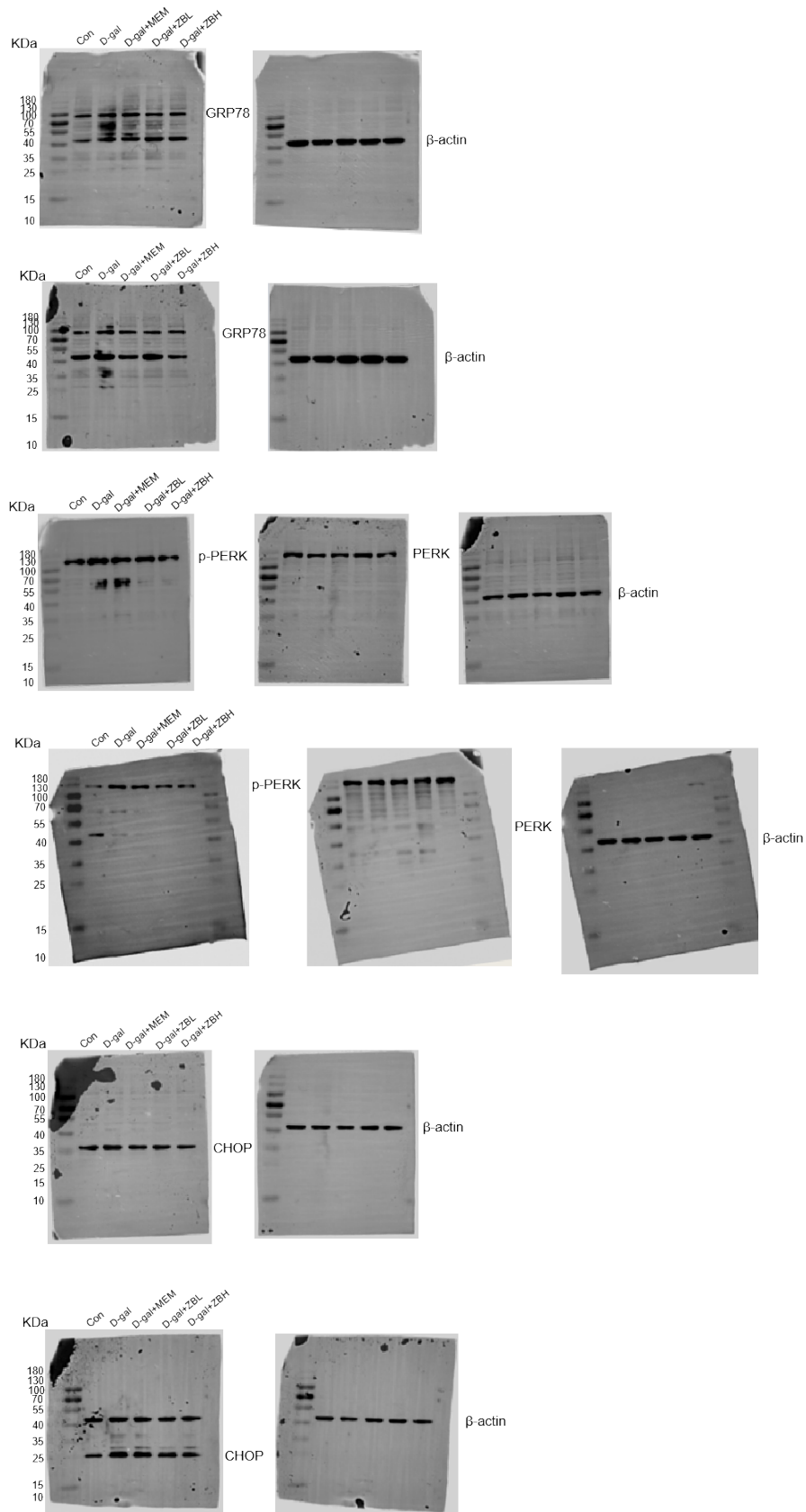


**Fig.4. Zerumbone inhibited D-gal-induced activation of PERK/CHOP pathway in vivo and in vitro**



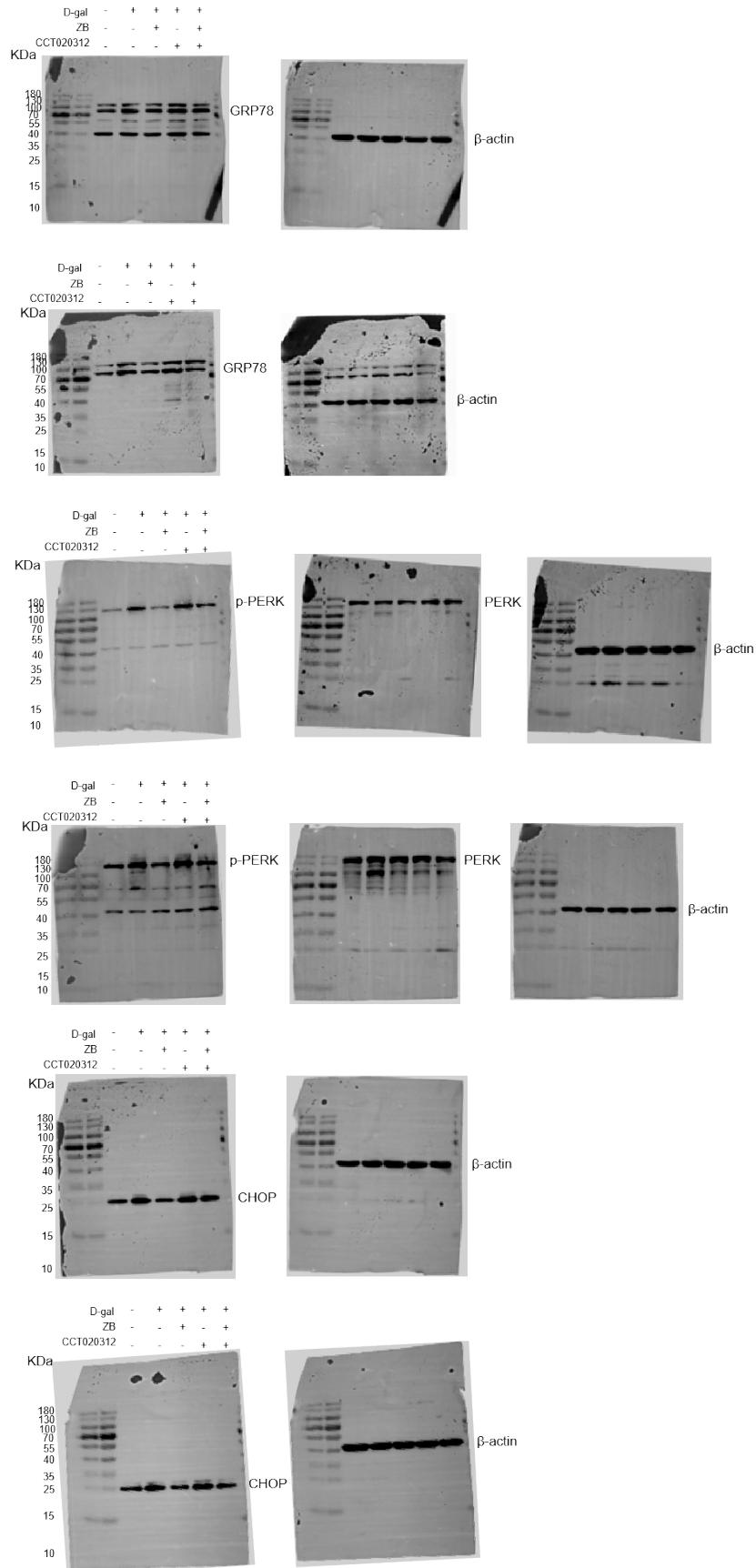
Repetitive Western blotting images of GRP78, p-PERK/PERK, and CHOP in D-gal-induced mice.

Repetitive Western blotting images of GRP78, p-PERK/PERK, and CHOP in D-gal-induced SH-SY5Y cells

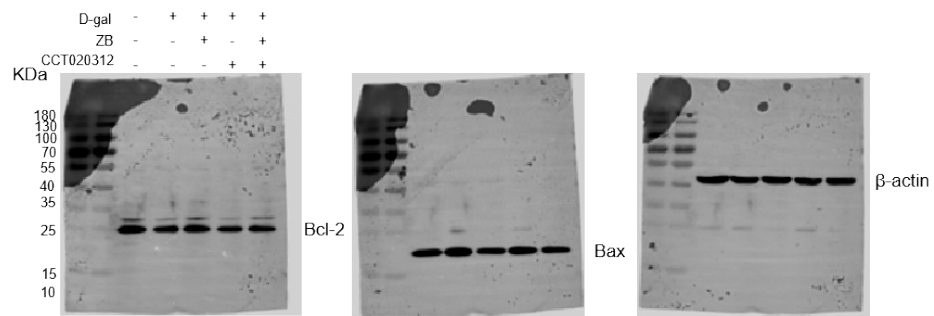
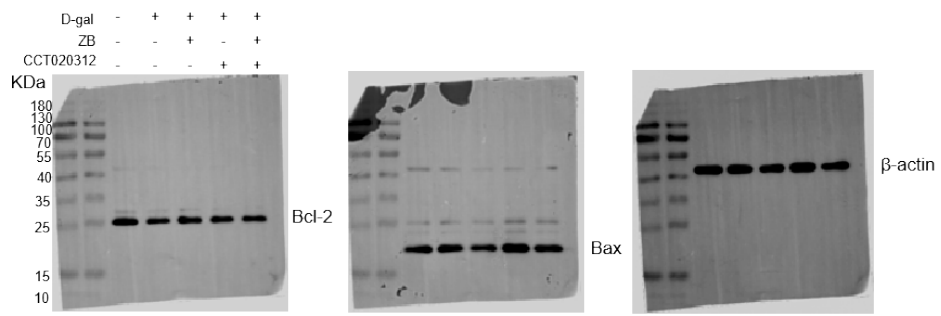
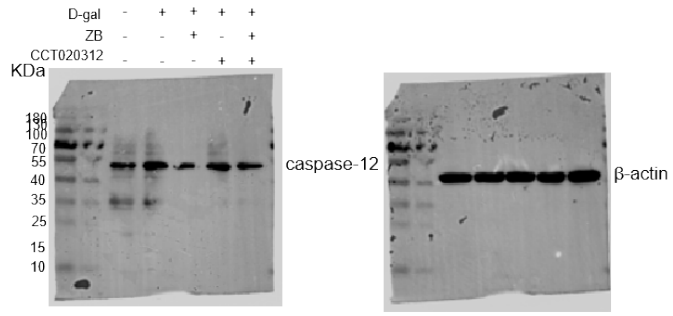
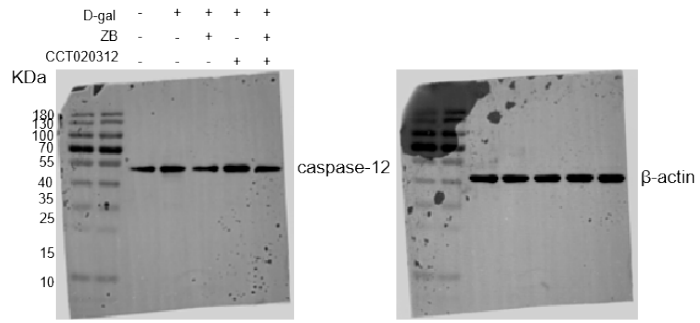


**Fig.5. Zerumbone inhibited D-gal-induced ER stress and apoptosis by PERK-dependent pathway in vitro.**

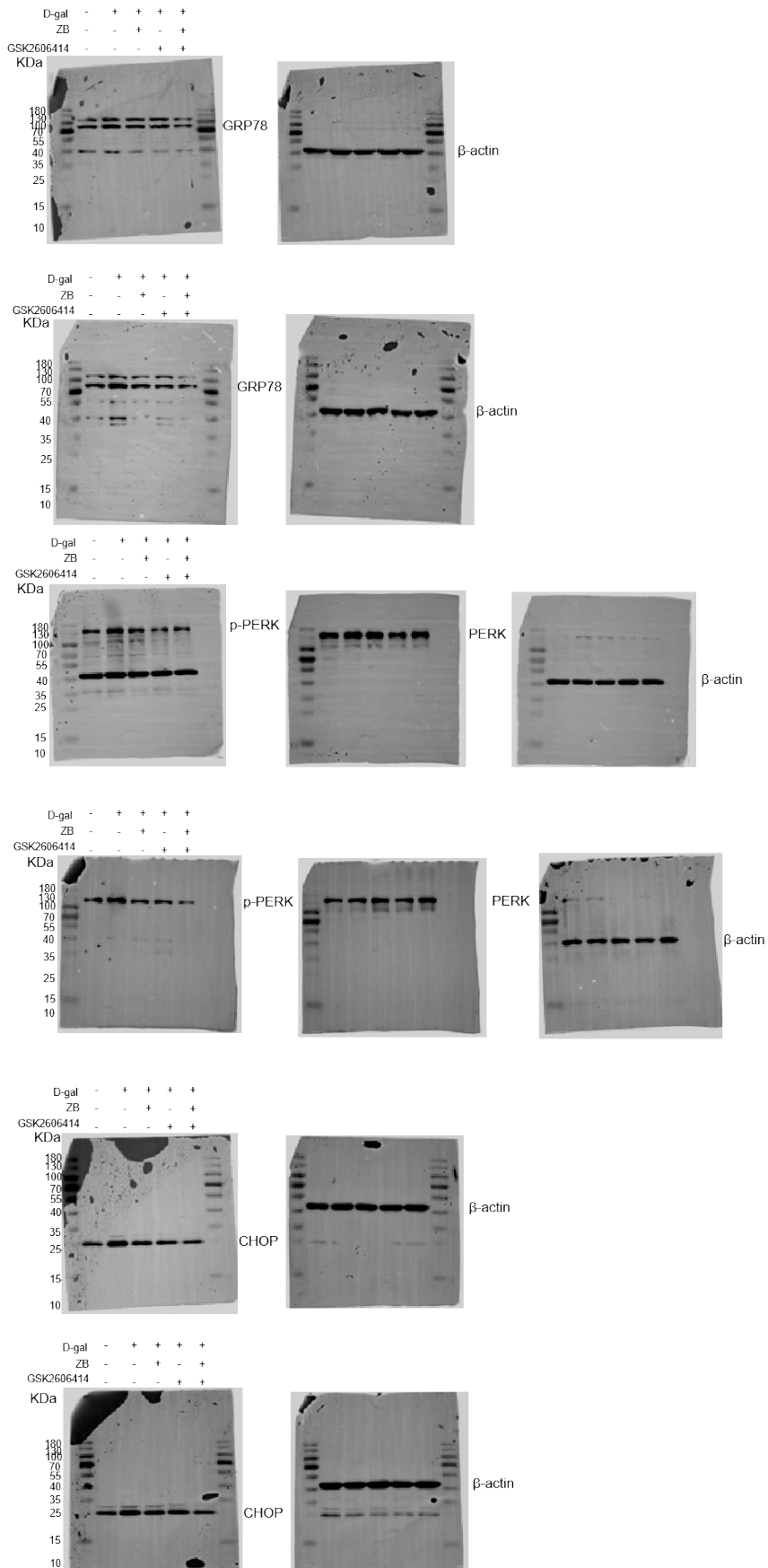
When CCT020312 (5  $\mu$ M) and ZB (8  $\mu$ M) were applied to treat cells together, repetitive Western blotting images



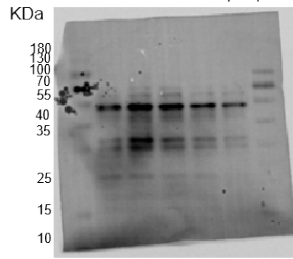
of GRP78, p-PERK/PERK, CHOP, Caspase-12 and Bcl-2/Bax in D-gal-induced SH-SY5Y cells.



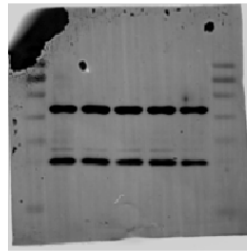
When GSK2606414 (0.25  $\mu$ M) and ZB (8  $\mu$ M) were applied to treat cells together, repetitive Western blotting images of GRP78, p-PERK/PERK, CHOP, Caspase-12 and Bcl-2/Bax in D-gal-induced SH-SY5Y cells.



D-gal	-	+	+	+	+
ZB	-	-	+	-	+
GSK2606414	-	-	-	+	+

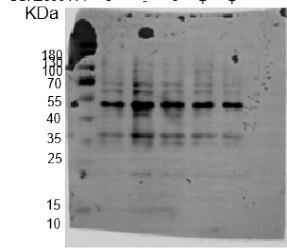


caspase-12

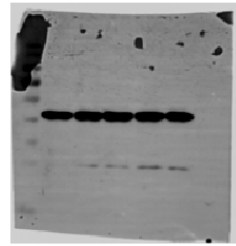


β-actin

D-gal	-	+	+	+	+
ZB	-	-	+	-	+
GSK2606414	-	-	-	+	+

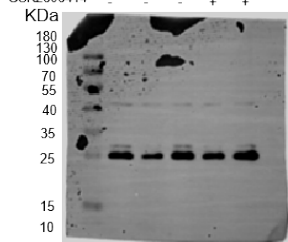


caspase-12

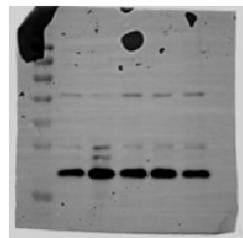


β-actin

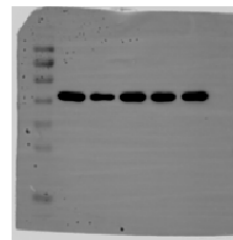
D-gal	-	+	+	+	+
ZB	-	-	+	-	+
GSK2606414	-	-	-	+	+



Bcl-2

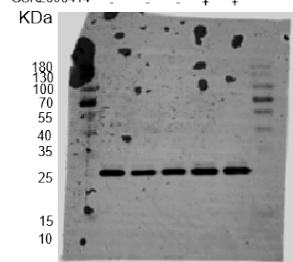


Bax

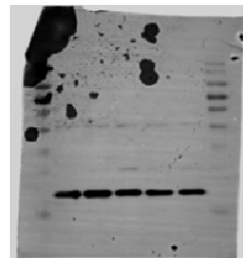


β-actin

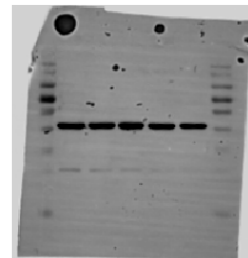
D-gal	-	+	+	+	+
ZB	-	-	+	-	+
GSK2606414	-	-	-	+	+



Bcl-2



Bax

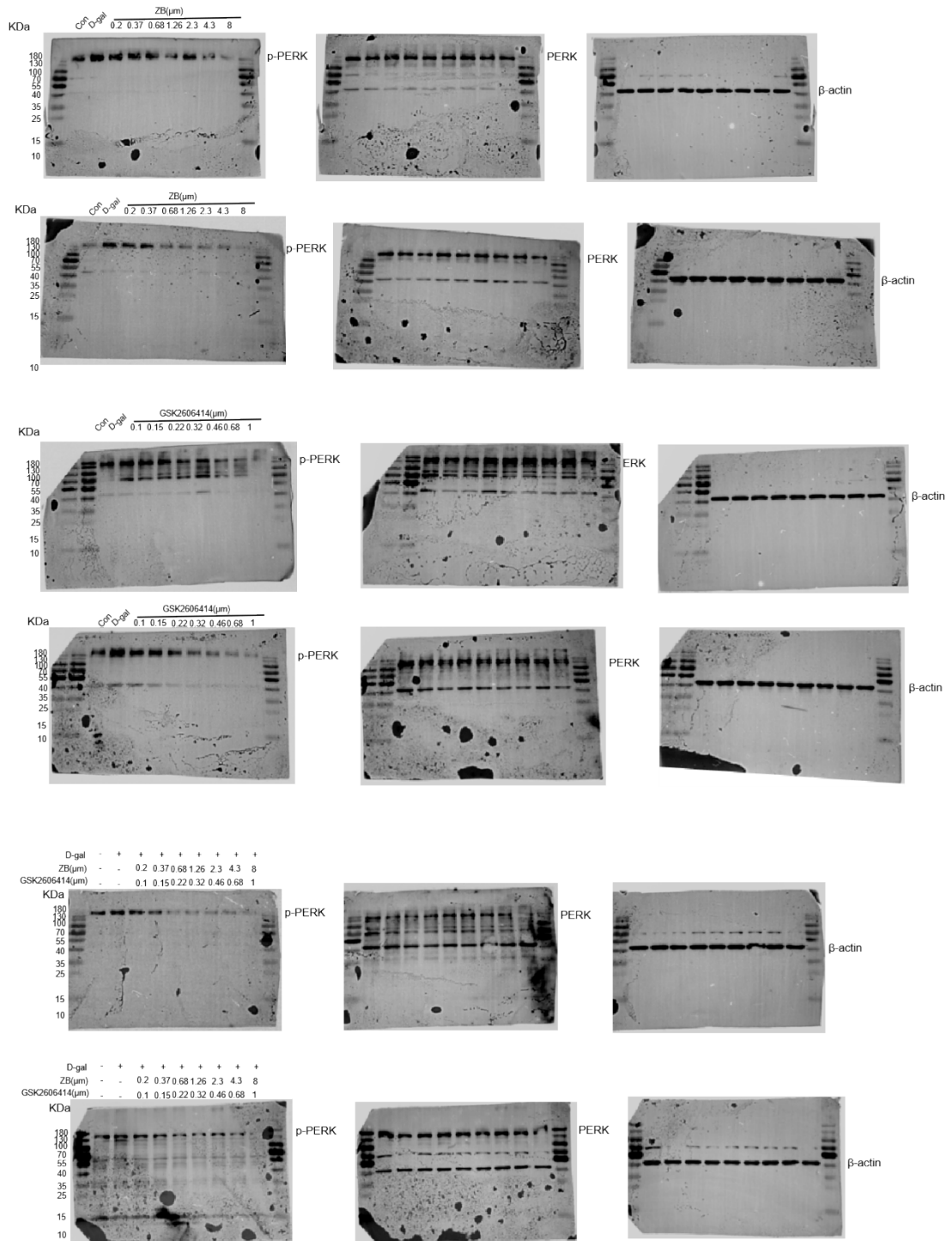


β-actin



**Fig.6. Calculation of medium efficiency equations and molecular docking**

Repetitive Western blotting images of p-PERK/PERK in D-gal-induced SH-SY5Y cells.



**Fig.7. Zerumbone reversed tunicamycin-induced the activation of PERK/CHOP pathway and apoptosis in vitro.**

Repetitive Western blotting images of GRP78, p-PERK/PERK, CHOP, Caspase-12 and Bcl-2/Bax in tunicamycin-induced SH-SY5Y cells.

