

# ER Protein Folding Antibody Sampler Kit

Cat# AK0154

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

## PRODUCT DESCRIPTION

After their synthesis, secretory proteins translocate into the endoplasmic reticulum (ER) where they are post-translationally modified and properly folded. To reach their native conformation, many secretory proteins require the formation of intra- or inter-molecular disulfide bonds. This process is called oxidative protein folding. Disulfide isomerase (PDI) catalyzes the formation and isomerization of these disulfide bonds. Studies on mechanisms of oxidative folding suggest that molecular oxygen oxidizes the ER-protein Ero1, which in turn oxidizes PDI through disulfide exchange. This event is then followed by PDI-catalyzed disulfide bond formation on folding proteins. Other ER resident proteins that possess the thioredoxin homology domains, including endoplasmic reticulum stress proteins 72, 57 and 44 (ERp72, ERp57 and ERp44), constitute the PDI family. The ER also contains a pool of molecular chaperones, including Grp94, to help proteins fold properly. Grp94 is a glucose-regulated protein with sequence homology to Hsp90. BiP is another chaperone whose synthesis is increased when protein folding is disturbed. BiP binds to misfolded proteins to prevent them from forming aggregates and assists in proper refolding.

## PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340552	HSPA5 Polyclonal Antibody	20µL	WB, IHC, IF, ELISA	Human, Mouse, Rat, Monkey	Rabbit
A340166	ERP44 Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse	Rabbit
A340715	ERP57 Polyclonal Antibody	20µL	WB, ELISA	Human, Mouse, Rat	Rabbit
A340506	HSP90B1 Polyclonal Antibody	20µL	WB, IHC, IF, ELISA	Human, Mouse	Rabbit
A1013s	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120µL	WB, ELISA	Rabbit	Goat

## **PRODUCT USE LIMITATION**

These products are intended for research use only.