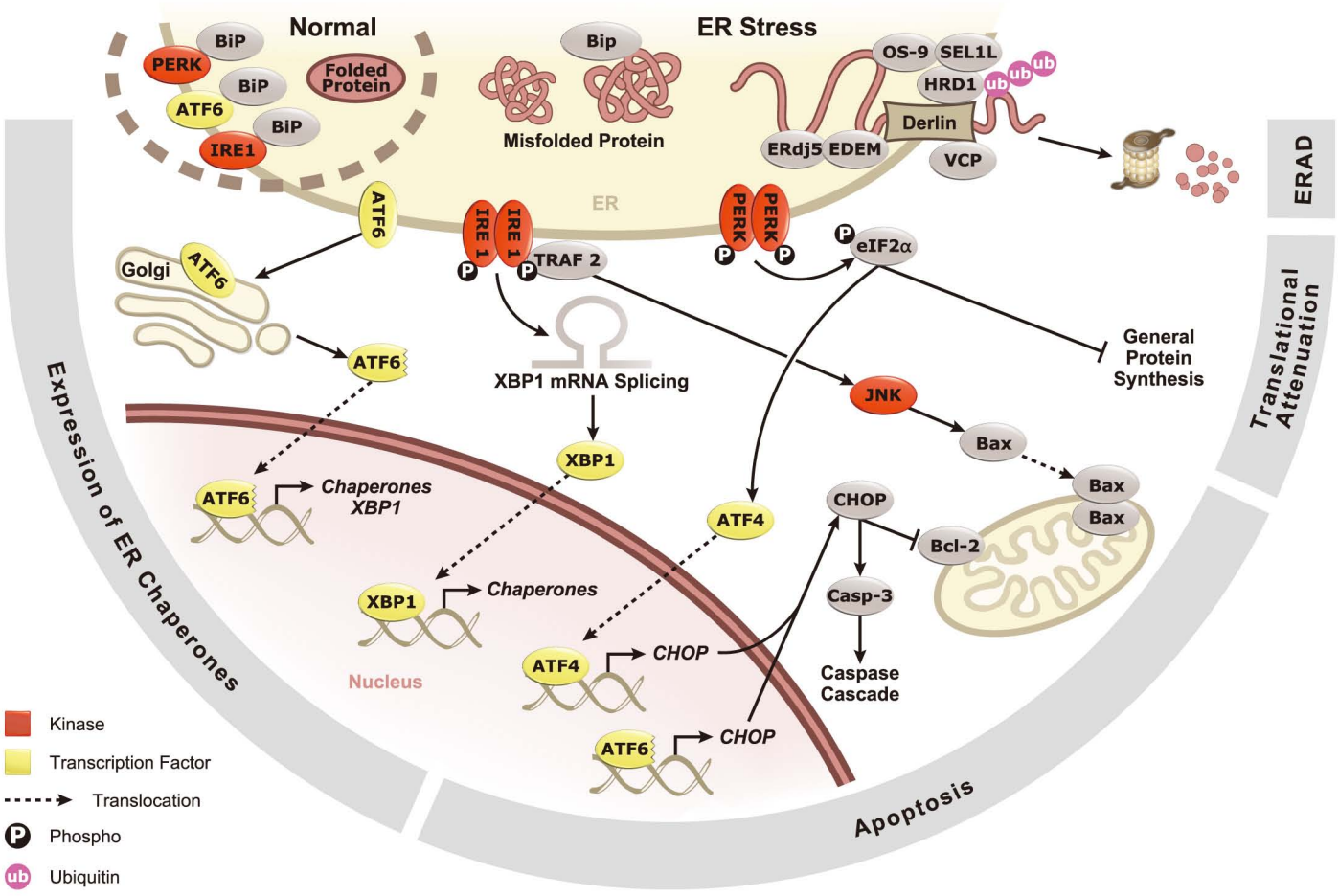
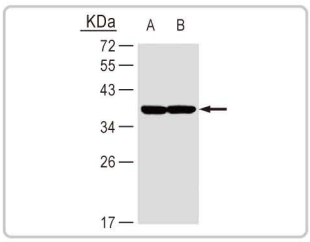
ER Stress



Endoplasmic reticulum (ER) stress is triggered when the accumulation of unfolded or misfolded proteins is detected by various sensors, including PERK, IRE1, and ATF6. This process is referred to as the unfolded protein response (UPS). Under conditions of ER stress, general protein synthesis is attenuated by PERK-mediated phosphorylation of eIF2α, and the transcriptional induction of ER chaperones by activated ATF6 and IRE1-regulated XBP1 is triggered to refold the unfolded proteins. UPS also leads to the elimination of misfolded proteins through ER-associated degradation (ERAD). In conditions of severe ER stress, the robust expression of CHOP triggers apoptosis. ER stress is associated with a variety of conditions including cancer, diabetes, inflammatory diseases, and neurodegenerative disorders.

ER stress sensors & effectors

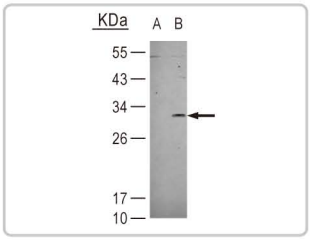
Cat. No.	Product	Host & Clonality	Reactivity	Application
GTX101943	ATF4 antibody	Rb pAb	Hu	WB
GTX89973	ATF4 antibody	Gt pAb	Hu, Ms, Pig, Rat	ELISA, WB
GTX81096	ATF6 antibody	Rb pAb	Hu	ELISA, FACS, IHC, WB
GTX11909	ATF6 antibody [70B1413]	Ms mAb	Hu	WB
GTX87772	ATF6B antibody	Rb pAb	Hu	ELISA, WB
GTX61039	eIF2α (phospho Ser51) antibody [E90]	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC-P, WB
GTX38625	eIF2α (phospho Ser51) antibody	Rb pAb	Hu, Ms, Rat	ICC/IF, IHC-P, WB
GTX100259	IRE1a antibody	Rb pAb	Hu	WB
GTX82996	IRE1a antibody [9F2]	Ms mAb	Hu	ELISA, FACS, ICC/IF, IHC
GTX88550	IRE1a antibody	Gt pAb	Hu, Ms, Dog, Rat	ELISA, WB
GTX87426	IRE1b antibody	Rb pAb	Hu, Ms	ELISA, ICC/IF, IHC
GTX81222	PERK antibody	Rb pAb	Hu	ELISA, IHC, WB
GTX82759	PERK antibody [5G5]	Ms mAb	Hu	ELISA
GTX102229	XBP1 antibody	Rb pAb	Hu	IHC-P, WB
GTX62600	XBP1 antibody [EPR4086]	Rb mAb	Hu	FACS, ICC/IF, IHC-P, WB
GTX88727	XBP1 antibody	Gt pAb	Hu, Dog	ELISA, WB



XBP1 antibody (GTX102229):
WB analysis of A) Molt-4 and B) Raji cell lysates.

CHOP/GADD153

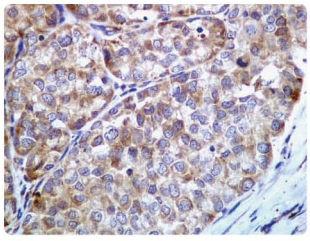
Cat. No.	Product	Host & Clonality	Reactivity	Application
GTX112827	GADD153 antibody	Rb pAb	Hu	WB
GTX116032	GADD153 antibody	Rb pAb	Hu	WB
GTX63049	GADD153 antibody [EPR4943]	Rb mAb	Hu, Ms, Rat	IP, WB
GTX11419	GADD153 antibody [9C8]	Ms mAb	Hu, Ms	IP, WB



GADD153 antibody (GTX112827):
WB analysis of A) control and B) tunicamycin-treated HeLa cell lysate.

ER chaperones

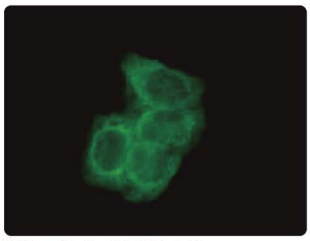
Cat. No.	Product	Host & Clonality	Reactivity	Application
GTX102567	BiP/GRP78 antibody	Rb pAb	Hu, Ms	WB
GTX113340	BiP/GRP78 antibody	Rb pAb	Hu	IHC-P, WB
GTX62643	BiP/GRP78 antibody [EPR4041(2)]	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC-M, IHC-P, WB
GTX103203	GRP94 antibody	Rb pAb	Hu, Ms	ICC/IF, IHC-P, WB
GTX103232	GRP94 antibody	Rb pAb	Hu, Ms	ICC/IF, IHC-P, WB
GTX101468	PDI antibody	Rb pAb	Hu, Ms	ICC/IF, IHC-P, WB
GTX22792	PDI antibody	Ms mAb	Hu, Ms, Hm, Pig, Rat	FACS, ICC/IF, IHC-P, IP, WB



GRP78 antibody [EPR4041(2)] (GTX62643):
IHC analysis of paraffin-embedded human breast carcinoma tissue.

Feedback regulators

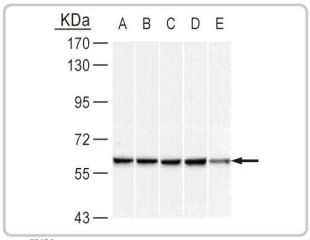
Cat. No.	Product	Host & Clonality	Reactivity	Application
GTX115747	GADD34 antibody	Rb pAb	Hu	WB
GTX111367	$p58^{INK}$ antibody	Rb pAb	Hu	IHC-P, WB
GTX111383	$p58^{INK}$ antibody	Rb pAb	Hu	WB



PDI antibody (GTX101468):
ICC/IF analysis of methanol-fixed A431 cells.

ERAD components

Cat. No.	Product	Host & Clonality	Reactivity	Application
GTX81054	Derlin1 antibody	Rb pAb	Hu, Ms	ELISA, FACS, IHC, WB
GTX81077	Derlin2 antibody	Rb pAb	Hu	ELISA, FACS, IHC, WB
GTX122163	Derlin3 antibody	Rabbit	Hu	WB
GTX82506	HRD1 antibody	Rb pAb	Hu	ELISA, IHC, WB
GTX63126	OS-9 antibody [EPR4272(2)]	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC-M, IHC-P, IP, WB
GTX37344	SEL1L antibody	Rb pAb	Hu, Ms, Rat	ELISA, IHC-P, WB
GTX88726	SEL1L antibody	Gt pAb	Hu, Ms, Dog, Rat	ELISA, WB
GTX62015	TorsinA antibody [EP2569Y]	Rb mAb	Hu	FACS, WB
GTX113030	VCP antibody	Rb pAb	Hu, Ms	ICC/IF, IHC-P, WB
GTX62809	VCP antibody [EPR3307(2)]	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC-M, IHC-P, IP, WB



$p58^{INK}$ antibody (GTX111383):
WB analysis of A) A431, B) H1299, C) HeLa, D) Molt-4, and E) Raji cell lysates.

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