

ATF6 Polyclonal Antibody

Product Specifications

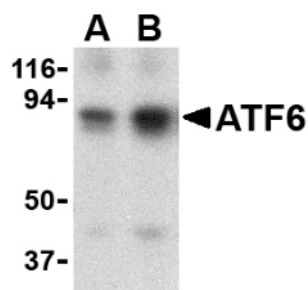
Catalog Number:	905-729-100
Host:	Rabbit
Species Reactivity:	Human, mouse
Applications: <i>The optimal dilution for a specific application must be determined by the investigator</i>	WB: 0.5-1 µg/mL ICC: 10 µg/mL
Predicted m.w.:	~88 kDa
Concentration:	See product label
Purification:	Peptide Affinity
Format:	PBS, 0.02% sodium azide
Storage: <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C
Immunogen:	Synthetic peptide corresponding to sequence near the amino-terminus of human ATF6
Related Products:	
905-727-100	IRE1p Polyclonal Antibody
905-739-100	XBP-1 Polyclonal Antibody
KAP-CP131	eIF-2α (phospho-Ser52) Polyclonal Antibody
KAP-CP132	eIF2α (phospho-Ser209) Polyclonal Antibody
KAP-CP130	eIF2α Polyclonal Antibody

Background:

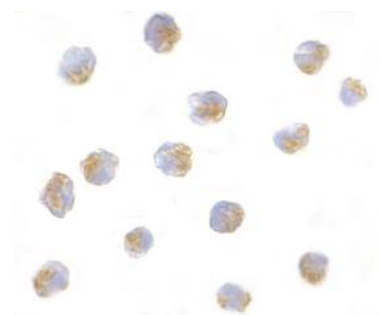
Disruptions of protein folding and maturation in the endoplasmic reticulum (ER) result in the activation of the unfolded protein response (UPR), an integrated cellular signaling pathway that transmits information from the ER lumen to the cytoplasm and nucleus. Activating transcription factor 6 (ATF6) as well as the ER-transmembrane protein kinases IRE1p and PERK are the major transducers of the UPR¹. ATF6 is an ER transmembrane protein that is normally bound to the ER chaperone GRP78, but upon ER stress is released from GRP78 and proteolytically cleaved to yield a cytosolic fragment which then migrates to the nucleus. Nuclear ATF6, together with the transcription factor XBP-1, activates transcription of UPR-responsive genes²⁻⁴. This antibody detects the ATF6 α, but not the ATF6β isoform.

References:

1. Liu, C.Y. and Kaufman, R.J. (2003) J Cell Sci. **116**, 1861-1862.
2. Haze, K., *et al.* (1999) Mol Cell Biol. **10**, 3787-3799.
3. Little, E., *et al.* (1994) Crit Rev Eukaryot Gene Expr. **4**, 1-18.
4. Yoshida, H., *et al.* (2001) Cell **107**, 881-891.



Western blot analysis of MDA-MB-361 cell lysate with ATF6 Polyclonal Antibody at (A) 0.5 and (B) 1 µg/mL.



Immunocytochemistry of A20 cells with ATF6 Polyclonal Antibody at 10 µg/mL.

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