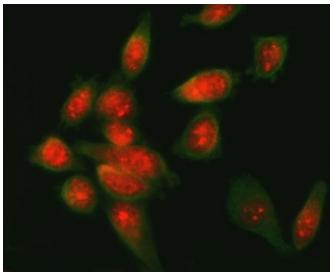
ATF6 Antibody / Activating transcription factor 6 (RQ7601)

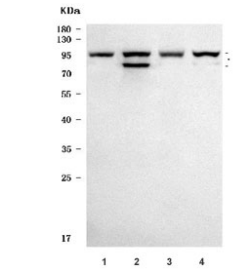
Catalog No.	Formulation	Size
RQ7601	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

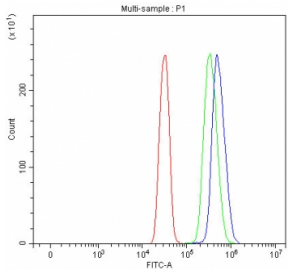
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P18850
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This ATF6 antibody is available for research use only.



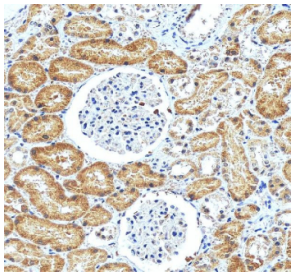
Immunofluorescent staining of FFPE human SiHa cells with ATF6 antibody (red) and Beta Tubulin mAb (green). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) 293T, 3) K562 and 4) MCF7 cell lysate with ATF6 antibody. Expected molecular weight: 75-90 kDa.



Flow cytometry testing of fixed and permeabilized human SiHa cells with ATF6 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ATF6 antibody.



IHC staining of FFPE human kidney tissue with ATF6 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

ATF6 (Activating Transcription Factor 6) is a key regulator of the unfolded protein response (UPR), a cellular stress pathway activated by the accumulation of misfolded proteins in the endoplasmic reticulum (ER). As a transmembrane protein localized to the ER, ATF6 remains inactive under normal conditions. Upon ER stress, it is transported to the Golgi apparatus, where it undergoes proteolytic cleavage to release its cytosolic fragment. This fragment then translocates to the nucleus and functions as a transcription factor, inducing genes involved in protein folding, quality control, and ER-associated degradation. Researchers frequently use an ATF6 antibody to investigate stress signaling and protein homeostasis.

ATF6 plays an essential role in maintaining ER function and protecting cells from stress-induced damage. By regulating molecular chaperones such as BiP and enzymes involved in protein degradation, ATF6 helps restore protein-folding capacity and reduce stress. Employing an ATF6 antibody allows scientists to monitor changes in protein expression and activity in response to environmental or pathological stress conditions.

Dysregulation of ATF6 has been associated with several human diseases, including diabetes, neurodegeneration, and cancer. In some contexts, prolonged or excessive ATF6 activation can promote apoptosis rather than adaptation, linking it to cell fate decisions. Because of its broad influence on cellular health, ATF6 is an attractive target for research into therapeutic interventions for ER stress-related diseases. Using an ATF6 antibody supports the study of these mechanisms across diverse biological models.

NSJ Bioreagents offers a high-quality ATF6 antibody validated for applications such as western blot, immunohistochemistry, and immunofluorescence. Choosing an ATF6 antibody from NSJ Bioreagents ensures reliable results and reproducibility in studies of the unfolded protein response and ER stress biology.

Application Notes

Optimal dilution of the ATF6 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids Q79-Q670) was used as the immunogen for the ATF6 antibody.

Storage

After reconstitution, the ATF6 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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