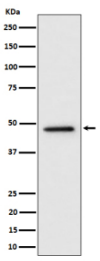
TOR4A Antibody / Torsin family 4 member A [clone 29T65] (FY13387)

Catalog No.	Formulation	Size
FY13387	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	29T65
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q9NXH8
Applications	Western Blot : 1:500-1:2000
Limitations	This TOR4A antibody is available for research use only.



Western blot analysis of TOR4A expression in human HeLa cell lysate using TOR4A antibody. Predicted molecular weight ~47 kDa.

Description

TOR4A antibody detects Torsin family 4 member A, encoded by the TOR4A gene. Torsin family 4 member A is a member of the AAA+ ATPase family of proteins, localized to the endoplasmic reticulum and nuclear envelope. TOR4A antibody provides researchers with a useful reagent to study endoplasmic reticulum biology, protein homeostasis, and nuclear envelope function.

Torsin family 4 member A is part of a family of ATPases that contribute to protein folding, trafficking, and quality control. Research using TOR4A antibody has shown that the protein supports structural organization of the endoplasmic reticulum and nuclear envelope. By interacting with other torsin proteins, TOR4A participates in maintaining organelle integrity and proteostasis under basal and stress conditions.

Studies with TOR4A antibody have revealed that the protein is involved in nuclear envelope structure and potentially nuclear pore dynamics. Disruption of torsin family proteins has been linked to nuclear envelope abnormalities and impaired nucleocytoplasmic transport. These findings suggest that TOR4A contributes to essential processes that support gene regulation and cell signaling.

Dysregulation of TOR4A has been implicated in disease. Research using TOR4A antibody has shown associations with cancer progression and viral infection. Overexpression in certain cancers correlates with altered protein folding capacity and stress adaptation, while some pathogens exploit torsin family proteins for replication. These findings underscore the relevance of TOR4A in health and pathology.

TOR4A antibody is commonly applied in western blotting, immunohistochemistry, and immunofluorescence. Western blotting detects endogenous protein levels, immunohistochemistry reveals tissue-specific expression, and immunofluorescence demonstrates localization to the endoplasmic reticulum and nuclear envelope. These applications make TOR4A antibody valuable for cell biology research.

By providing validated TOR4A antibody reagents, NSJ Bioreagents supports studies into organelle biology, stress responses, and disease. Detection of Torsin family 4 member A provides insights into how AAA+ ATPases contribute to proteostasis and nuclear structure.

Application Notes

Optimal dilution of the TOR4A antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human TOR4A was used as the immunogen for the TOR4A antibody.

Storage

Store the TOR4A antibody at -20oC.