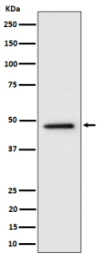
TOR4A Antibody 29T65 / Torsin-4A Antibody [clone 29T65] (FY13387)

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

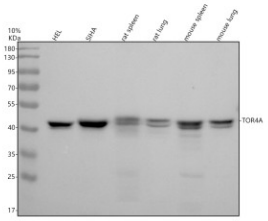
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
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
Limitations	This TOR4A Antibody 29T65 / Torsin-4A Antibody is available for research use only.



TOR4A Antibody 29T65 in Human Cells WB. Western blot testing of human cell lysate with TOR4A Antibody 29T65 / Torsin-4A Antibody, clone 29T65. A specific band is observed at approximately 47 kDa, consistent with the expected molecular weight of TOR4A.



TOR4A Antibody 29T65 in Human, Mouse and Rat WB. Western blot testing of human HEL erythroleukemia and SIHA cervical cancer cell lysates, rat spleen and lung tissue lysates, and mouse spleen and lung tissue lysates with TOR4A Antibody 29T65 / Torsin-4A Antibody, clone 29T65, at 1:500 overnight at 4oC. Lane 1: HEL. Lane 2: SIHA. Lane 3: rat spleen. Lane 4: rat lung. Lane 5: mouse spleen. Lane 6: mouse lung. A specific band is observed at approximately 47 kDa, consistent with the expected molecular weight of TOR4A.

Description

TOR4A Antibody 29T65 / Torsin-4A Antibody detects torsin family 4 member A (TOR4A), a member of the torsin family of AAA+ ATPase proteins. TOR4A is predicted to possess ATP-binding and ATP-hydrolysis activity and is associated with the endoplasmic reticulum lumen and nuclear envelope. These properties place TOR4A within a family of proteins involved in maintaining the structure and function of membrane-bound cellular compartments.

Torsins are unusual members of the AAA+ ATPase superfamily because they reside within the lumen of the endoplasmic reticulum and contiguous nuclear envelope rather than functioning as conventional cytoplasmic ATPases. Members of this family participate in processes associated with membrane organization, protein homeostasis and cellular responses to changes in organelle function. TOR4A, also called Torsin-4A, provides a target for investigating how individual torsin family members contribute to these cellular systems.

The nuclear envelope is continuous with the endoplasmic reticulum and serves both as a physical boundary surrounding the genome and as a specialized membrane system involved in nuclear organization. Other torsin family proteins have been implicated in nuclear envelope architecture and processes associated with nuclear pore complexes. The predicted localization of TOR4A to the endoplasmic reticulum lumen and nuclear envelope therefore makes it relevant to research examining the relationship between ATPase activity, membrane organization and nuclear structure.

TOR4A was historically designated C9orf167, or chromosome 9 open reading frame 167, before its classification within the torsin family. Compared with some other torsins, the biological functions of TOR4A remain relatively incompletely characterized. Research into TOR4A may help define both shared and specialized functions among torsin proteins and clarify their contributions to organelle homeostasis, proteostasis and cellular physiology.

Clone 29T65 is a recombinant rabbit monoclonal antibody generated against a synthetic peptide derived from human TOR4A. It has been evaluated for detection of TOR4A protein in research applications. NSJ Bioreagents supplies antibodies for cell biology, organelle and protein homeostasis research. A TOR4A Antibody can be used to investigate torsin biology, endoplasmic reticulum function, nuclear envelope organization and mechanisms of cellular proteostasis.

For additional antibodies targeting proteins involved in cellular regulatory pathways, stress responses and protein homeostasis, explore our Signal Transduction Antibodies page.

Application Notes

Optimal dilution of the TOR4A Antibody 29T65 / Torsin-4A Antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human TOR4A was used as the immunogen for the TOR4A Antibody 29T65.

Storage

Store the TOR4A Antibody 29T65 at -20oC.

Alternate Names

TOR4A antibody, Torsin-4A antibody, Torsin Family 4 Member A antibody, C9orf167 antibody, Chromosome 9 Open Reading Frame 167 antibody

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