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ACTL7A Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10469a

Specification

ACTL7A Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q9Y615
Other Accession	Q4R6Q3, NP_006678.1
Reactivity	**Human**
Predicted	**Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**48644**
Antigen Region	**41-67**

ACTL7A Antibody (N-term) - Additional Information

Gene ID 10881

Other Names
Actin-like protein 7A, Actin-like-7-alpha, ACTL7A

Target/Specificity
This ACTL7A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 41-67 amino acids from the N-terminal region of human ACTL7A.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ACTL7A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ACTL7A Antibody (N-term) - Protein Information

Name ACTL7A

Function Essential for normal spermatogenesis and male fertility. Required for normal sperm head morphology, acroplaxome formation, acrosome attachment, and acrosome granule stability. May anchor and stabilize acrosomal adherence to the acroplaxome at least in part by facilitating the presence of F-actin in the subacrosomal space (By similarity). May play an important role in formation and fusion of Golgi-derived vesicles during acrosome biogenesis (PubMed:32923619).

Cellular Location
Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9QY84}. Golgi apparatus {ECO:0000250|UniProtKB:Q9QY84}. Cytoplasm {ECO:0000250|UniProtKB:Q9QY84}. Nucleus {ECO:0000250|UniProtKB:Q9QY84} Cytoplasmic vesicle, secretory vesicle, acrosome Note=Detected at the Golgi apparatus during acrosome biogenesis Detected at the subacrosomal layer in round spermatids. Detected in sperm head and tail. {ECO:0000250|UniProtKB:Q9QY84}

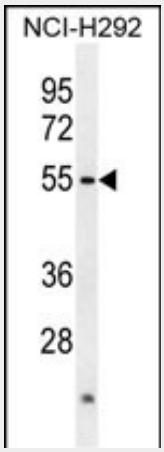
Tissue Location
Strongly expressed in testis. Also expressed in other tissues.

ACTL7A Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ACTL7A Antibody (N-term) - Images



ACTL7A Antibody (N-term) (Cat. #AP10469a) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the ACTL7A antibody detected the ACTL7A protein (arrow).

ACTL7A Antibody (N-term) - Background

ACTL7A is a member of a family of actin-related proteins (ARPs) which share significant amino acid sequence identity to conventional actins. Both actins and ARPs have an actin fold, which is an ATP-binding cleft, as a common feature.

The ARPs are involved in diverse cellular processes, including vesicular transport, spindle orientation, nuclear migration and chromatin remodeling. ACTL7A (ACTL7A), and related gene, ACTL7B, are intronless, and are located approximately 4 kb apart in a head-to-head orientation within the familial dysautonomia candidate region on 9q31. Based on mutational analysis of the ACTL7A gene in patients with this disorder, it was concluded that it is unlikely to be involved in the pathogenesis of dysautonomia. The ACTL7A gene is expressed in a wide variety of adult tissues, however, its exact function is not known.

ACTL7A Antibody (N-term) - References

Aberg, K., et al. Hum. Biol. 80(2):99-123(2008)
Humphray, S.J., et al. Nature 429(6990):369-374(2004)
Garvalov, B.K., et al. J. Cell Biol. 161(1):33-39(2003)
Coutts, A.S., et al. J. Cell. Sci. 116 (PT 5), 897-906 (2003) :
Chadwick, B.P., et al. Genomics 58(3):302-309(1999)