

ACTL7A Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP10469a**Specification**

ACTL7A Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [O9Y615](#)
Other Accession [NP_006678.1](#)

ACTL7A Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 10881

Other Names

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ACTL7A Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ACTL7A Antibody (N-term) Blocking Peptide - Images**ACTL7A Antibody (N-term) Blocking Peptide - 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 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) Blocking Peptide - 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)