

Anti-SHIPPO 1/Ciliary microtubule associated protein 1A antibody, rabbit polyclonal

Product code	73-081
Size	100 μg
Storage	-20°C
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from rabbit antiserum
Immunogen	Purified mouse SHIPPO1(1aa-202aa) with Hit tag expressed in <i>E.coli</i> .
Isotype	Rabbit IgG
Reactivity	mouse
Special notes	
Application	1. Western blotting (1-10µg/ml)
	2. Immunofluorescence staining (1-20μg/ml)
Background	Shippo 1 cDNA was isolated in haploid germ cell-specific cDNA clone from a subtracted cDNA library of mouse testis. Shippo 1 cDNA encodes a highly hydrophobic putative protein, SHIPPO 1, which exists in the cytoplasm of spermatids and along the entire length of the sperm tail of mature spermatozoa. Further localization of SHIPPO 1 to the ODF and FS was ascertained by fractionation of the sperm proteins. The homology between the mouse and human sequences suggests that SHIPPO 1 proteins have an important functional role in the sperm tail. (Ref.1) Molecular mass: 27.6 kDa. Detected 32 kDa in mouse testis by WB.(Ref.1)
Data Link	UniPlotKB Q920N1 (CMA1A_MOUSE)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC	
PROCEDURES. NOT FOR MILITARY USE.	



Data Images: 73-081 Anti-SHIPPO 1 (Ciliary microtubule associated protein 1A) antibody, rabbit polyclonal

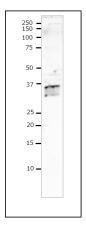


Fig.1 Western Blot of SHIPPO 1 protein

Applied sample; 20µg of mouse testis whole lysate.

Primary antibody; 1µg/ml of anti-SHIPPO 1 antibody

Secondary antibody; 1/10,000 dilution of goat anti-rabbit IgG antibody HRP-conjugated, ab97051)

Molecular mass of SHIPPO 1; 32 kDa

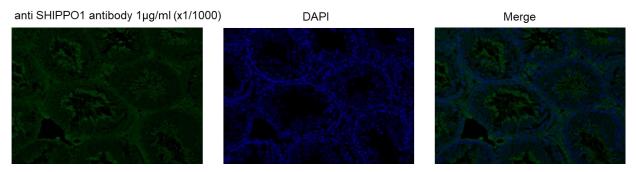


Fig.2. Immunohistochemical staining of SHIPPO 1 in mouse testis with anti-SHIPPO 1 antibody. Section of formalin-fixed and paraffin embedded mouse testis was reacted with anti-SHIPPO 1 antibody at 1/1000 dilution. Nuclear DNA was stained with DAPI (center) and merged image is shown.



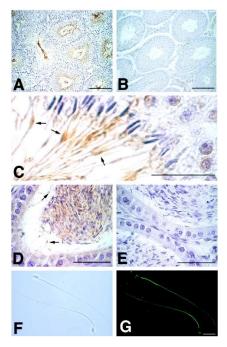


Fig.3 Immunohistochemical analysis of SHIPPO 1 protein (Ref.1)

Anti-SHIPPO 1 antibody recognized the tail of an elongating spermatid protruding toward the lumen of the seminiferous epithelium (A). Control using the preimmune serum shown in B. Signal was also present in cytoplasmic droplets of sperm just before they left the seminiferous epithelium (C). Epididymal sperm was positive at the tail and cytoplasmic droplets were discarded (D). No signal was observed with the preimmune serum (E). SHIPPO 1 signal was detected along the entire length of the tail of mature sperm in the vas deferens. F) Phase-contrast and G) immunofluorescent microscopic pictures. Arrows indicate cytoplasmic droplets. Bars = 10 µm

Reference: This product has been used in the following publication.

1. Carlos Egydio de Carvalho, Tanaka H, Nishimune Y, et al. Molecular cloning and characterization of a complementary DNA encoding sperm tail protein SHIPPO 1. Biology of Reproduction; 66(3) 785–795 (2002) PMID: <u>11870087</u>. **WB, IF**