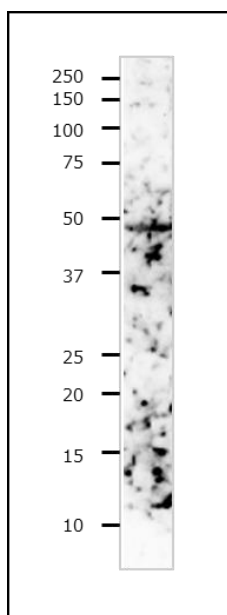


## Anti-t-Actin 1 /ACTLB antibody, rabbit polyclonal

<b>Product code</b>	73-077
<b>Size</b>	100 µg
<b>Storage</b>	-20°C
<b>Concentration</b>	1.0 mg/ml
<b>Buffer</b>	PBS- with 50% glycerol
<b>Purity</b>	Purified IgG fraction with protein A from rabbit antiserum
<b>Immunogen</b>	Synthetic peptide MATKNSPSPKPMGT conjugated KLH
<b>Isotype</b>	Rabbit IgG
<b>Reactivity</b>	Mouse
<b>Special notes</b>	N/A
<b>Application</b>	1. Western blotting (1-10µg/ml)
<b>Background</b>	<p>Actins play essential roles in cellular morphogenesis. In mice, the T-actin1 (testis specific action 1) and 2 (testis specific action 2) genes, which encode actin-like proteins, are specifically expressed in haploid germ cells. Both t-ACTIN1/ACTLB and t-ACTIN2/ACTL7A have also been cloned. The orthologous genes in humans are present on chromosome 9q31.3 as intronless genes. Defects of germ cell-specific genes can introduce infertility without somatic function impairment. T-ACTIN1 and 2 are specifically expressed in the testis.</p> <p><b>Molecular mass:</b> Mouse 45.5 kDa</p>
<b>Data Link</b>	UniProtKB <a href="#">Q9QY83</a> (ACL7B_MOUSE)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

**Data Images:** 73-077 Anti-t-Actin 1 /ACTLB antibody, rabbit polyclonal



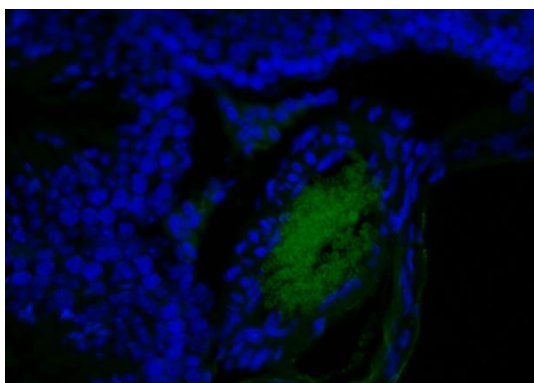
**Fig.1 Western Blot of t-Actin 1 protein**

Applied sample; 50µg of mouse testis whole lysate.

Primary antibody; 1µg/ml of anti-t-Actin 1 antibody

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

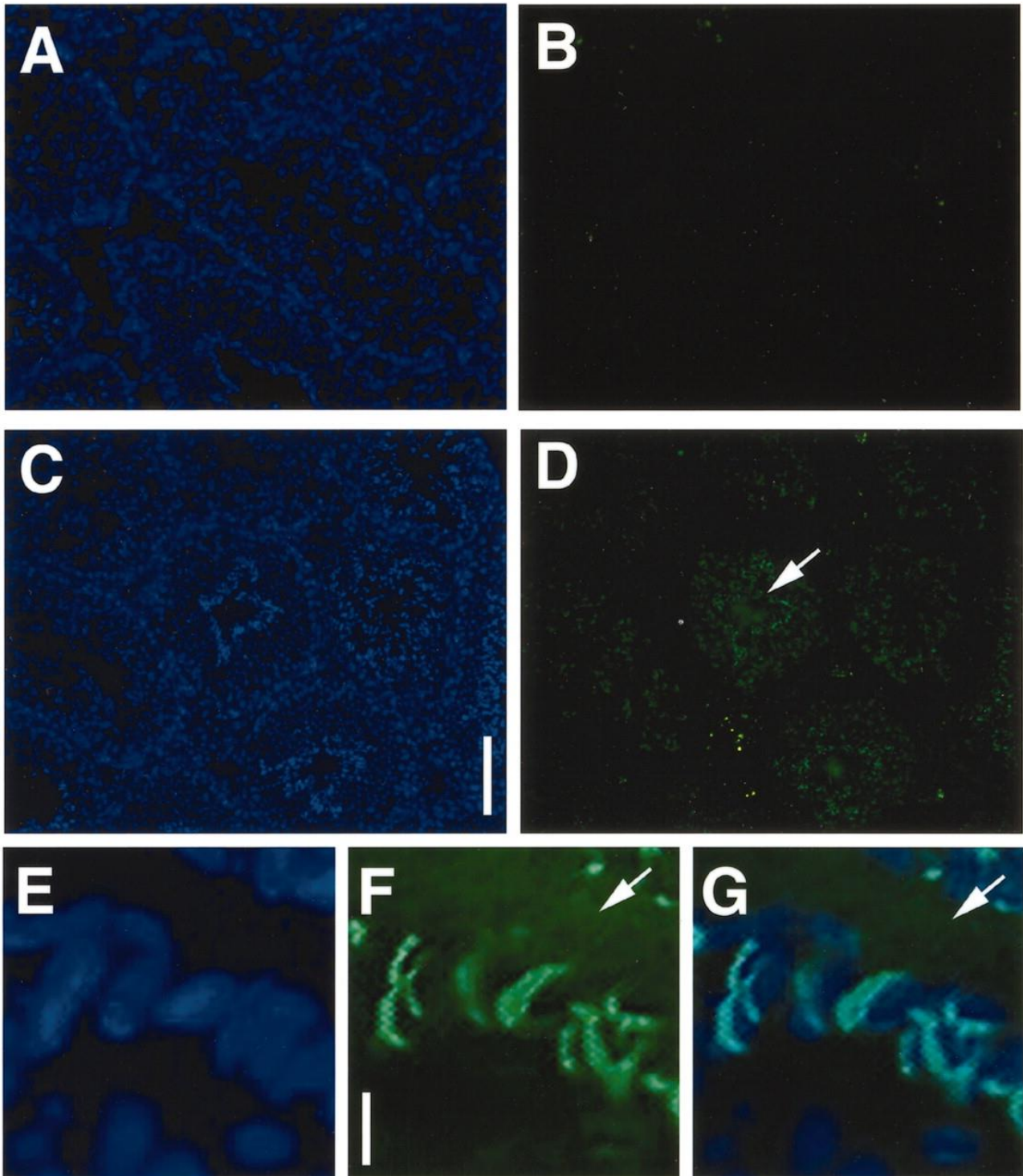
Molecular mass of mouse t-Actin 1 ; 45.5 kDa



**Fig.2 Immunohistochemical staining of t-Actin 1 protein in mouse testis section using anti-t-Actin1 antibody.**

mouse testis ( 4% PFA) HMPS-41-10; genostaff)

Anti-t-Actin1 antibody was used at 50µg/ml. The second antibody was used Alexa-Fluor 488 labeled anti-rabbit IgG (green). Nuclei was stained with DAPI (blue).



**Fig.3 Immunohistochemical staining of T-ACTIN 1 in mouse testes. (Ref.2)**

The testes were stained with anti-T-ACTIN 1 rabbit antiserum. Testicular cross sections were examined under a fluorescence microscope with a blue-filter for 4',6'-diamidino-2-phenylindole (A, C, and E) or a green-filter for the FITC-labeled secondary antiserum (B, D, and F). Blots were made using preimmune control serum (A and B) and anti-T-ACTIN 1 antiserum (C-G). Bar = 100  $\mu$ m for C. Higher magnification of the stage VII/VIII tubules show the amorphous positive staining at the tubule centers (arrows, D, F, and G). G represents a merged image of E and F. Bar = 10  $\mu$ m

**Reference:**

1. Tanaka H, *et al.* Genetic Polymorphisms within The Intronless ACTL7A and ACTL7B Genes Encoding Spermatogenesis-Specific Actin-Like Proteins in Japanese Males. *Int J Fertil Steril.*(3) 245-249 (2019) PMID: [31310081](#). **WB**
2. Tanaka H, et al. Novel actin-like proteins T-ACTIN 1 and T-ACTIN 2 are differentially expressed in the cytoplasm and nucleus of mouse haploid germ cells. *Biol Reprod* (2) 475-482 (2003) PMID: [12672658](#). **WB, IF**

**Related product**

73- Anti-t-Actin 2 /ACTLA antibody, rabbit polyclonal