

Anti-ACE3 antibody, rabbit serum

Product code	73-006
Size	100 µl
Storage	Store 4°C for short term For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Concentration	N/A
Buffer	0.09% sodium azide
Purity	Rabbit antiserum
Immunogen	NTENTPWMKNEGQS (C-terminal of mouse ACE3)
Isotype	Rabbit IgG
Reactivity	Mouse. Not tested with other species.
Special notes	N/A
Application	1. Western blotting (1/500-1/1,000 dilution) 2. Immunoprecipitation (1/100 dilution) 3. Immunofluorescence staining (1/100 dilution) Other applicacatiotons have not been tested.
Background	ACE3 was identified as an IZUMO1 interacting protein from mouse sperm. ACE3 protein is exclusively localized in testis and sperm. However, unlike the disruption of IZUMO1 or ACE, elimination of ACE3 in mouse did not result in loss of sperm fertilizing ability. ACE3 consists of 737 amino acids with molecular mass of 86 kDa.
Data Link	uniprot/D0G895 mouse Ace3 Gene ID 217246 mouse Ace3
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 73-006 Anti-ACE3 antibody, rabbit serum

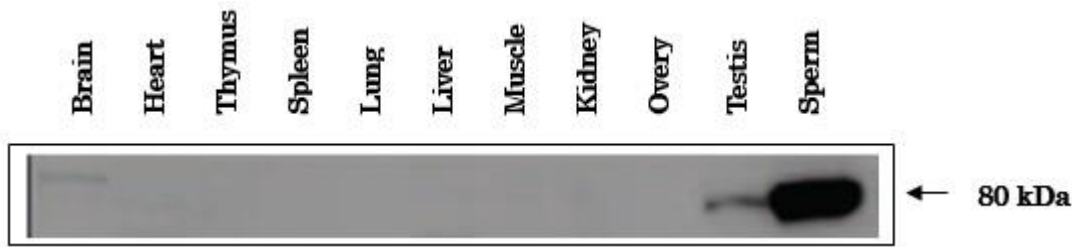


Fig. 1. Expression of ACE3 in Testis and sperm of mouse as identified by western blotting with anti-ACE3 antibody.

All samples were loaded at 30 µg protein and detected with anti-ACE3 antibody at 1/500 dilution.

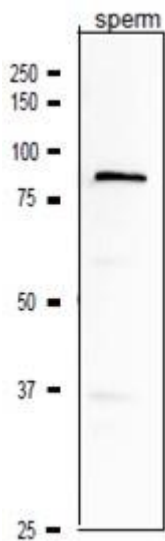


Fig.2 Western blotting analysis of ACE3 protein in crude extract of mouse sperm with anti-ACE3 antibody.

The extract (10 µg protein) was separated in 10% SDS-PAGE gel and electro-blotted to PVDF membrane. The membrane was reacted with anti-ACE3 antibody at 1/1,000 dilution. As the 2nd antibody, anti-rabbit IgG antibody conjugated with HRP (ab97057) was used at 1/10,000 dilution.

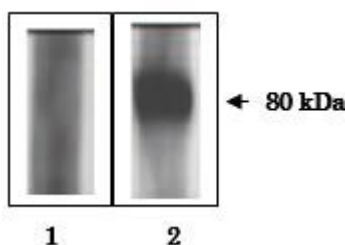


Fig.3. Immunoprecipitation of ACE3 protein from sperm lysate. ACE3 protein was immunoprecipitated from total sperm protein (~100 µg) with anti-ACE3 antibody and detected by western blotting with anti-ACE3 antibody.

1. Non-immune serum. 2. Anti-ACE3 antibody



Fig.4. Subcellular localization of ACE3 protein in sperm.

Mouse sperm were prepared from cauda epidymis, fixed with ethanol and stained with anti-ACE3 antibody at 1/100. As a secondary antibody, Alexa Fluor 546 conjugated anti-rabbit IgG.

Reference: This antibody has been described and used in the following publication.

1. Inoue N. et al. Identification and disruption of sperm-specific angiotensin converting enzyme-3 (ACE3) in mouse. PubMed [PLoS One](#). 2010 Apr 22;5(4):e10301. doi: 10.1371. Open access. **WB, IP, IF**