For Research Use Only

TNP1 Polyclonal antibody

Catalog Number: 17178-1-AP 23 Publications



Purification Method:

Antigen affinity purification

Recommended Dilutions:

Basic Information

Catalog Number:
17178-1-AP
Concentration:
800 ug/ml
Source:
Rabbit

Isotype: Full Name:
IgG transition protein 1 (during histone to

Immunogen Catalog Number:

AG10890

Observed MW: 6-10 kDa

Applications

WB, IF-P, IF-Fro, ELISA Cited Applications: WB, IHC, IF Species Specificity: human, mouse, rat Cited Species:

human, mouse

Tested Applications:

GenBank Accession Number:

BC029516 GeneID (NCBI): 7141 UNIPROT ID: P09430

protamine replacement)

Calculated MW: 55 aa, 7 kDa

WB: 1:500-1:2000 IF-P: 1:50-1:500 IF-Fro: 1:50-1:500

Positive Controls:

WB: mouse testis tissue,

IF-P: mouse testis tissue,

IF-Fro: mouse testis tissue,

Background Information

Transition nuclear proteins (TNP1 and TNP2) are the major nuclear proteins that replace somatic histones during spermatogenesis. TNPs are required for normal chromatin condensation and functional sperm development, spermatogenesis was found to be compromised in both Tnp1 and Tnp2 null mice. TNP1, or TP1, localized in nucleus, is a spermatid-specific product of the haploid genome which replaces histone and is itself replaced in the mature sperm by the protamines. Recently, TNP-1 was used as a germ cell marker in condensing spermatids.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|-----------------|-----------|----------------|-------------|
| Zijun Peng | 34741939 | J Hazard Mater | IF,IHC |
| Yi Yu | 33046149 | Zygote | IF |
| Akane Morohoshi | 30391586 | Dev Biol | IF |

Storage

Storage:

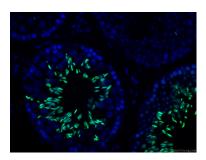
Store at -20°C. Stable for one year after shipment.

Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

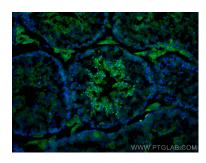
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using 17178-1-AP (TNP1 antibody), at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



mouse testis tissue were subjected to SDS PAGE followed by western blot with 17178-1-AP (TNP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse testis tissue using 17178-1-AP (TNP1 antibody) at dilution of 1:200 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit $\lg G(H+L)$.