

# Rabbit Anti-Tex14 antibody

# SL10437R

<b>Product Name:</b>	Tex14
Chinese Name:	癌/睾丸抗原113抗体
Alias:	Cancer/testis antigen 113; CT113; Inactive serine/threonine protein kinase TEX14; SGK307; Protein kinase like protein SgK307; Sugen kinase 307; Testis expressed Protein 14; Testis expressed sequence 14; Testis expressed sequence 14 protein; TEX14_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	168kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Tex14:101-200/1497
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	TEX14 is a 1,497 amino acid protein that belongs to the protein kinase superfamily and is expressed in testis. The gene encoding TEX14 is located on chromosome 17 and is required for spermatogenesis and normal structure of the intercellular bridge that connects spermatocytes and spermatogonia. TEX14 co-localizes with the centralspindlin

complex, MKLP-1 (mitotic kinesin-like protein 1) and male germ cell Rac GTPase (Rac GTPase-activating protein) and converts these midbody matrix proteins into stable intercellular bridge components. TEX14 contains 3 ANK repeats and 1 protein kinase domain. Three isoforms exist due to alternative splicing events.

#### **Function:**

Testis-expressed gene 14 (TEX14) is a novel protein that localizes to germ cell intercellular bridges. In the absence of TEX14, intercellular bridges are not observed. Spermatogenesis in Tex14—/— mice progresses through the transit amplification of diploid spermatogonia and the expression of early meiotic markers but halts before the completion of the first meiotic division.

#### **Subunit:**

Interacts with KIF23 and RBM44. Interacts with CEP55; inhibiting interaction between CEP55 and PDCD6IP/ALIX and TSG101

#### Subcellular Location:

Cytoplasm. Midbody. Chromosome, centromere, kinetochore. Note=Detected in the intercellular bridges that connect male germ cell daughter cells after cell division.

### Tissue Specificity:

Detected in testis.

#### Post-translational modifications:

Phosphorylated on Thr residues by CDK1 during early phases of mitosis, promoting the interaction with PLK1 and recruitment to kinetochores. Phosphorylated on Ser-437 by PLK1 during late prometaphase promotes the rapid depletion from kinetochores and its subsequent degradation by the APC/C complex.

#### Similarity:

Belongs to the protein kinase superfamily.

Contains 3 ANK repeats.

Contains 1 protein kinase domain.

#### **SWISS:**

Q8IWB6

#### Gene ID:

56155

#### Database links:

Entrez Gene: 522810Cow

Entrez Gene: 56155Human

Entrez Gene: 83560Mouse

Omim: 605792Human

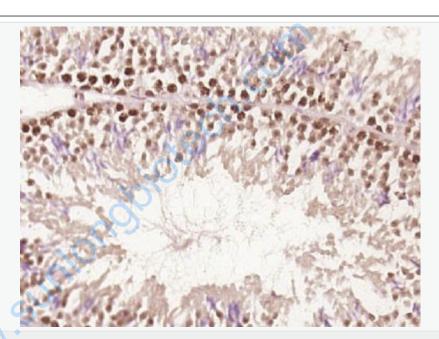
SwissProt: F1MJR8Cow

SwissProt: Q8IWB6Human

SwissProt: Q7M6U3Mouse

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



# Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Tex14) Polyclonal Antibody, Unconjugated (SL10437R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.