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Tex14 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54264

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q8IWB6
Reactivity	Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	167901
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Tex14
Epitope Specificity	101-200/1497
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Midbody. Chromosome, centromere, kinetochore. Note=Detected in the intercellular bridges that connect male germ cell daughter cells after cell division.
SIMILARITY	Belongs to the protein kinase superfamily. Contains 3 ANK repeats. Contains 1 protein kinase domain.
SUBUNIT	Interacts with KIF23 and RBM44. Interacts with CEP55; inhibiting interaction between CEP55 and PDCD6IP/ALIX and TSG101.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

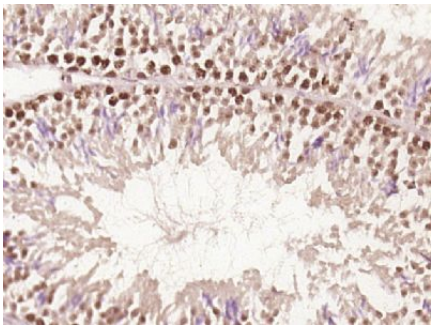
Gene ID	56155
Other Names	Inactive serine/threonine-protein kinase TEX14, Protein kinase-like protein

	SgK307, Sugen kinase 307, Testis-expressed sequence 14, Testis-expressed sequence 14 protein, TEX14, SGK307
Target/Specificity	Detected in testis.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	TEX14
Synonyms	SGK307
Function	Required both for the formation of intercellular bridges during meiosis and for kinetochore-microtubule attachment during mitosis. Intercellular bridges are evolutionarily conserved structures that connect differentiating germ cells and are required for spermatogenesis and male fertility. Acts by promoting the conversion of midbodies into intercellular bridges via its interaction with CEP55: interaction with CEP55 inhibits the interaction between CEP55 and PDCD6IP/ALIX and TSG101, blocking cell abscission and leading to transform midbodies into intercellular bridges. Also plays a role during mitosis: recruited to kinetochores by PLK1 during early mitosis and regulates the maturation of the outer kinetochores and microtubule attachment. Has no protein kinase activity in vitro (By similarity).
Cellular Location	Cytoplasm. Midbody. Chromosome, centromere, kinetochore. Note=Detected in the intercellular bridges that connect male germ cell daughter cells after cell division.
Tissue Location	Expression restricted to testis.

Images



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 (AP54264) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.