

Haspin Rabbit pAb

Catalog # AP96263

Product Information

Application	WB
Reactivity	Rat, Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	88 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse Haspin
Epitope Specificity	421-520/754
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	Nucleus. Chromosome. Cytoplasm, cytoskeleton, spindle. Note=Nuclear during interphase and associates with the chromosomes and spindle apparatus during mitosis.
SIMILARITY	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Haspin subfamily. Contains 1 protein kinase domain.
Post-translational modifications	Autophosphorylated on both serine and threonine residues (By similarity). Strongly phosphorylated during mitosis but this does not appear to significantly affect its intrinsic kinase activity. Phosphorylation by AURKB is required for full activity toward histone H3 at 'Ser-3' in mitosis.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Haspins is a protein family containing a distinctive C-terminal kinase domain and a divergent N-terminus. Haspin homologues occur within a diverse group of eukaryotes, including animals, plants and fungi, which suggests an early evolutionary origin. Haspin, a nuclear protein strongly expressed in male germ cells, is responsible for the phosphorylation of histone H3 at Thr-3. Depletion of Haspin RNA prevents normal alignment of chromosomes at metaphase, suggesting a crucial role for haspin during chromosome segregation. Expression of haspin also occurs in adult thymus and bone marrow, with weaker expression in adult prostate, intestine, lung, spleen, and lymph node. The gene encoding human haspin maps to chromosome 17p13.

Additional Information

Other Names	GSG2; HASP_HUMAN; HASPIN; Germ cell-specific gene 2 protein; H-haspin; Haploid germ cell-specific nuclear protein kinase; 2.7.11.1; histone H3 associated protein kinase; germ cell associated 2 (haspin)
Target/Specificity	Strongly expressed in testis. Also present in thymus and bone marrow and low levels observed in prostate, intestine, lung, spleen and lymph node. Expressed in fetal skin, liver, kidney and small intestine and also in

proliferating but not non-proliferating cell lines.

Dilution

WB=1:500-2000

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.

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Function

Serine/threonine-protein kinase that phosphorylates histone H3 at 'Ser-3' (H3T3ph) during mitosis. This positions and activates AURKB and other components of the chromosomal passenger complex (CPC) at centromeres to ensure proper chromatid cohesion, metaphase alignment and normal progression through the cell cycle.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.