

# GSG2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8064c

## **Product Information**

Application	IHC-P, WB, E
Primary Accession	<u>Q8TF76</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	88495
Antigen Region	323-352

## **Additional Information**

Gene ID	83903
Other Names	Serine/threonine-protein kinase haspin, Germ cell-specific gene 2 protein, H-haspin, Haploid germ cell-specific nuclear protein kinase, GSG2
Target/Specificity	This Haspin GSG2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 323~352 amino acids from the central region of human haspin.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GSG2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name	HASPIN ( <u>HGNC:19682</u> )
Function	Serine/threonine-protein kinase that phosphorylates histone H3 at 'Thr-3' (H3T3ph) during mitosis. May act through H3T3ph to both position and modulate activation of 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.
Cellular Location	Nucleus. Chromosome. Cytoplasm, cytoskeleton, spindle. Note=Nuclear during interphase and associates with the chromosomes and spindle apparatus during mitosis
Tissue Location	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.

#### Background

Post-translational modifications of conserved N-terminal tail residues in histones regulate many aspects of chromosome activity. Mitotic phosphorylation of H3 Thr 3 occurs in prophase and dephosphorylation during anaphase. Haspin, a dual serine/threonine kinase, plays an important role in regulation of chromosome and spindle function during mitosis and meiosis via its function in phosphorylation of the threonine residue in the third position of histone 3 (Thr3).

#### References

Dai, Jun et al. Genes Dev 19:472-88 (2005). Higgins, J.M., Gene 267(1):55-69 (2001). Tanaka, H., et al., Mol. Hum. Reprod. 7(3):211-218 (2001).

#### Images



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

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