

## **GSG2** Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8064c

## Specification

# **GSG2** Antibody (Center) - Product Information

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

## **GSG2** Antibody (Center) - 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~~1:50~100 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 purified through a protein A column, followed by peptide affinity purification.

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.

# **GSG2** Antibody (Center) - Protein Information

Name HASPIN (HGNC:19682)

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**

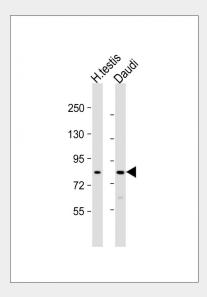
Strongly expressed in testis. Also present in thymus and bone marrow and low levels observed in prostate, intestine, lung, spleen and lymph node. Expressed in fetal skin, liver, kidney and small intestine and also in proliferating but not non-proliferating cell lines.

## GSG2 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

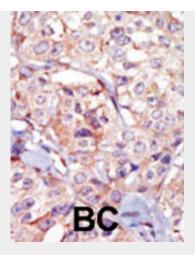
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## GSG2 Antibody (Center) - Images



All lanes : Anti-GSG2 Antibody (Center) at 1:1000 dilution Lane 1: human testis lysate Lane 2: Daudi whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 88 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





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.

# GSG2 Antibody (Center) - 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).

# **GSG2** Antibody (Center) - 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).