

Bub1b-CT. Sheep Polyclonal Antibody , Mouse

Bub1b C-terminal; BubR1

BACKGROUND

Bub1, a mitotic checkpoint gene first identified in yeast, ensures proper chromosome segregation by delaying anaphase until chromosomes are properly aligned on the mitotic spindle. Mutations in the mitotic spindle assembly checkpoint genes, like yeast Bub1, cause cells to exit mitosis without proper chromosome attachment/alignment, resulting in aneuploidy. Aneuploidy is a form of genetic instability involved in cancer. Recently, a novel homologue of the murine Bub1 gene has been identified and named Bub1b. The yeast mitotic checkpoint pathway is unresolved, but the mammalian pathway remains even less clear. It is important to investigate the role of the Bub1 genes in the mammalian checkpoint as they have been implicated in carcinogenesis, namely colon carcinomas. The aneuploidy and chromosome instability characterizing some tumors is thought to be caused by mutations in Bub1.

ORDERING INFORMATION

CATALOG NUMBER
X1161P

SIZE
100 µg

FORM
Unconjugated

HOST/CLONE
Sheep

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
1 mg/ml

ISOTYPE
IgG

APPLICATIONS
Western Blot, Immunohistochemistry

IMMUNOGEN

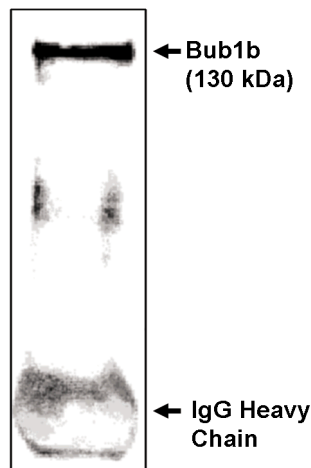
Recombinant protein corresponding to amino acids 883-1052 of the mouse Bub1b protein.

SPECIES REACTIVITY

Mouse

Legend:

Immunoprecipitation/
Western blot analysis
using Bub1b-CT antibody on NIH/3T3
cells synchronized to obtain mostly
mitotic cells as determined by flow
cytometry.



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POSITIVE CONTROL/TISSUE EXPRESSION

Mitotic NIH/3T3 cells

COMMENTS

Antibody detects Bub1b in mitotic cells separated from NIH/3T3 cells by IP/Western blot (1-10 $\mu\text{g/ml}$) analysis. Detects a 130 kDa band. Optimal concentration should be evaluated by serial dilutions.

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C . Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Myrie, K.A., et al. "Mutation and expression analysis of human Bub1 and Bub1b in aneuploid breast cancer cell lines." *Cancer Lett.* 2000, 152, 193-199.
2. Davenport, J.W., et al. "The mouse mitotic checkpoint gene bub1b, a novel bub1 family member, is expressed in a cell cycle-dependent manner." *Genomics* 1999, 55, 113-117.

LAST MODIFIED 8/30/2007

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