**PBK/TOPK Antibody**

For Research Use Only. Not for Use in Diagnostic Procedures.

### Product Usage Information

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<th>Application</th>
<th>Dilution</th>
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<td>Western Blotting</td>
<td>1:1000</td>
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<tr>
<td>Immunohistochemistry (Paraffin)</td>
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### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

### Specificity / Sensitivity

PBK/TOPK Antibody detects endogenous levels of total PBK/TOPK protein.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acids at the carboxy-terminus of human PBK/TOPK. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

PBK/TOPK is a serine/threonine kinase that is phosphorylated and active during mitosis (1). PBK/TOPK is composed of kinase subdomains and a carboxy-terminal PDZ-Binding domain, which is thought to interact with the tumor suppressor protein hDlg (1). Increased PBK/TOPK expression has been observed in highly proliferative malignant cell lines, and PBK/TOPK expression is strongly downregulated during terminal differentiation of HL-60 leukemic cells (2,3). PMA-induced kinase activity toward PBK/TOPK has been observed (4), and cdc2/cyclinB has been shown to phosphorylate PBK/TOPK in vitro, presumably at Thr9 (1). Potential substrates of PBK/TOPK include p38 MAPK and c-Myc (3,4).

### Background References


### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

- **WB**: Western Blotting
- **IHC-P**: Immunohistochemistry (Paraffin)

### Cross-Reactivity Key

- **H**: human
- **M**: mouse
- **R**: rat
- **Hm**: hamster
- **Mk**: monkey
- **Vir**: virus
- **Mi**: mink
- **C**: chicken
- **Dm**: D. melanogaster
- **X**: Xenopus
- **Z**: zebrafish
- **B**: bovine
- **Dg**: dog
- **Pg**: pig
- **Sc**: S. cerevisiae
- **Ce**: C. elegans
- **Hr**: horse
- **GP**: Guinea Pig
- **Rab**: rabbit
- **All**: all species expected

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