

# Phospho-PBK/TOPK (Thr9) Antibody



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

|                           |                         |                                   |                        |                                  |                               |                                 |
|---------------------------|-------------------------|-----------------------------------|------------------------|----------------------------------|-------------------------------|---------------------------------|
| <b>Applications:</b><br>W | <b>Reactivity:</b><br>H | <b>Sensitivity:</b><br>Endogenous | <b>MW (kDa):</b><br>40 | <b>Source/Isotype:</b><br>Rabbit | <b>UniProt ID:</b><br>#Q96KB5 | <b>Entrez-Gene Id:</b><br>55872 |
|---------------------------|-------------------------|-----------------------------------|------------------------|----------------------------------|-------------------------------|---------------------------------|

## Product Usage Information

### Application

Western Blotting

### Dilution

1:1000

## 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

Phospho-PBK/TOPK (Thr9) Antibody detects endogenous levels of PBK/TOPK only when phosphorylated at threonine 9.

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to amino acids around Thr9 of human PBK/TOPK. Antibodies are purified by protein A and 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

1. Gaudet, S. et al. (2000) *Proc. Natl. Acad. Sci. U S A* 97, 5167-5172.
2. Simons-Evelyn, M. et al. (2001) *Blood Cells Mol. Dis.* 27, 825-829.
3. Nandi, A. et al. (2004) *Blood Cells Mol. Dis.* 32, 240-245.
4. Abe, Y. et al. (2000) *J. Biol. Chem.* 276, 21525-21531.
5. Matsumoto, S. et al. (2004) *Biochem Biophys Res Commun.* 325, 997-1004.

## 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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**W:** Western Blotting

## Cross-Reactivity Key

**H:** Human

## Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](http://cellsignal.com/trademarks) for more information.

## Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for

diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.