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#3504

## TBK1/NAK (D1B4) Rabbit mAb

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

|                                    |                                |                                   |                        |                                      |                               |                                 |
|------------------------------------|--------------------------------|-----------------------------------|------------------------|--------------------------------------|-------------------------------|---------------------------------|
| <b>Applications:</b><br>W, W-S, IP | <b>Reactivity:</b><br>H M R Mk | <b>Sensitivity:</b><br>Endogenous | <b>MW (kDa):</b><br>84 | <b>Source/Isotype:</b><br>Rabbit IgG | <b>UniProt ID:</b><br>#Q9UHD2 | <b>Entrez-Gene Id:</b><br>29110 |
|------------------------------------|--------------------------------|-----------------------------------|------------------------|--------------------------------------|-------------------------------|---------------------------------|

### Product Usage Information

#### Application

Western Blotting  
Simple Western™  
Immunoprecipitation

#### Dilution

1:1000  
1:50 - 1:250  
1:100

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

TBK1/NAK (D1B4) Rabbit mAb detects endogenous levels of total TBK1/NAK protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser645 of human TBK1/NAK.

### Background

TBK1 (TANK-binding kinase 1)/NAK (NF-κB activating kinase) is an IκB kinase (IKK)-activating kinase and can activate IKK through direct phosphorylation (1). TBK1 was identified through association with the TRAF binding protein, TANK, and found to function upstream of NIK and IKK in the activation of NF-κB (2). TBK1 induces IκB degradation and NF-κB activity through IKKβ. TBK1 may mediate IKK and NF-κB activation in response to growth factors that stimulate PKCε activity (1). TBK1 plays a pivotal role in the activation of IRF3 in the innate immune response (3).

### Background References

- Tojima, Y. et al. (2000) *Nature* 404, 778-82.
- Pomerantz, J.L. and Baltimore, D. (1999) *EMBO J* 18, 6694-704.
- Fitzgerald, K.A. et al. (2003) *Nat Immunol* 4, 491-6.

### 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

**W:** Western Blotting **W-S:** Simple Western™ **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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