

Store at -20°C  
#8738

## Phospho-CK2 Substrate [(pS/pT)DXE] MultiMab® Rabbit mAb mix



**Cell Signaling**  
TECHNOLOGY®

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

<b>Applications:</b> WB	<b>Reactivity:</b> All	<b>Sensitivity:</b> Endogenous	<b>Source/Isotype:</b> Rabbit
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### 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, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity / Sensitivity

Phospho-CK2 Substrate [(pS/pT)DXE] MultiMab® Rabbit mAb mix recognizes endogenous proteins containing a pS/pTDXE motif, which is a CK2 phosphorylation consensus sequence. This antibody is a useful tool to study CK2 substrates.

### Source / Purification

MultiMab® rabbit monoclonal mix antibodies are prepared by combining individual rabbit monoclonal clones in optimized ratios for the approved applications. Each antibody in the mix is carefully selected based on motif recognition and performance in multiple assays. Each mix is engineered to yield the broadest possible coverage of the modification being studied while ensuring a high degree of specificity for the modification or motif.

### Background

Casein Kinase II (CK2) is a highly conserved, ubiquitously expressed, and constitutively active tetrameric Ser/Thr protein kinase with hundreds of substrates participating in the regulation of a variety of cellular processes including cell cycle progression, apoptosis, transcription, inflammation, and the DNA damage response. Research studies have implicated CK2 in roles related to viral infection, cancer, and other diseases (1-5). CK2 substrates contain multiple acidic residues (Asp and Glu) located downstream of the phosphorylated Ser or Thr residue. The consensus sequence for CK2 substrates is pS/pTDXE with the most crucial residue at the +3 position followed by the residue at the +1 position (6).

### Background References

1. Pinna, L.A. and Allende, J.E. (2009) *Cell Mol Life Sci* 66, 1795-9.
2. St-Denis, N.A. and Litchfield, D.W. (2009) *Cell Mol Life Sci* 66, 1817-29.
3. Trembley, J.H. et al. (2009) *Cell Mol Life Sci* 66, 1858-67.
4. Perez, D.I. et al. (2011) *Med Res Rev* 31, 924-54.
5. Dominguez, I. et al. (2009) *Cell Mol Life Sci* 66, 1850-7.
6. Meggio, F. and Pinna, L.A. (2003) *FASEB J* 17, 349-68.

### 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

### 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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