#9477 Store at -20°C

Phospho-CDK Substrate Motif [(K/H)pSP] MultiMab™ Rabbit mAb mix

Cell Signaling TECHNOLOGY®

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

rev. 04/14/16

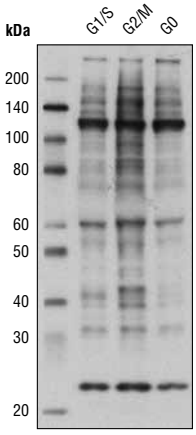
For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Species Cross-Reactivity*	Isotype
W, IP, E-P	All	Rabbit IgG**
Endogenous		

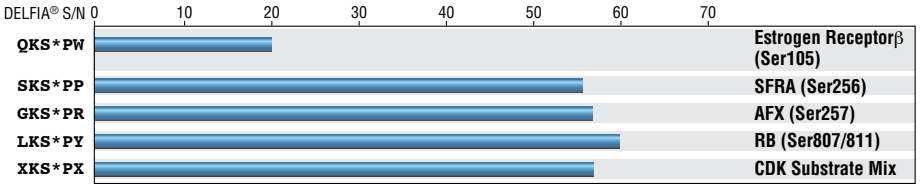
Background: Cyclin-dependent kinases (CDKs) are a family of Ser/Thr kinases that regulate cell-cycle transitions through their association and subsequent phosphorylation of targets in a strictly ordered fashion (1). The substrates for CDKs are proline-directed. The consensus amino acid sequence for CDK substrate is (K/R)(S*)PX(K/R), where X denotes any one of the 20 amino acids (2-4) and S* is the phosphorylation site. Phospho-CDK Substrate Motif [(K/H)pSP] MultiMab™ Rabbit mAb mix recognizes phosphorylated CDK substrates at their consensus motif, providing a powerful tool for CDK target discovery and characterization, as well as HTS drug screening for potential kinase regulators.

Specificity/Sensitivity: Phospho-CDK Substrate Motif [(K/H)pSP] MultiMab™ Rabbit mAb mix recognizes phospho-serine in a (K/H)S*P motif. The antibody does not cross-react with phospho-threonine or phospho-tyrosine containing peptides/proteins.

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.



Western blot analysis of extracts from COS-7 cells, synchronized in G1/S, G2/M, and G0 phase of the cell cycle, using Phospho-CDK Substrate Motif [(K/H)pSP] MultiMab™ Rabbit mAb mix.



Phospho-CDK Substrate Motif [(K/H)pSP] MultiMab™ Rabbit mAb mix ELISA assay: Signal-to-noise ratio of phospho- versus nonphospho-peptides. (S denotes phosphorylated serine.)*

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

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.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50
ELISA (Peptide)	1:1000

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

Background References:

(1) Morgan, D.O. (1997) *Annu Rev Cell Dev Biol* 13, 261-91.

(2) Songyang, Z. et al. (1996) *Mol Cell Biol* 16, 6486-93.

(3) Songyang, Z. (1999) *Prog Biophys Mol Biol* 71, 359-72.

(4) Holmes, J.K. and Solomon, M.J. (1996) *J Biol Chem* 271, 25240-6.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.