

Store at
-20°C
#16175

Phospho-Rb (Ser807/811) Matched Antibody Pair



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Species Cross Reactivity: H Mk
UniProt ID: #P06400
Entrez-Gene Id: #5925

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

| Product Includes | Product # | Quantity | Isotype/Source |
|--|-----------|----------|----------------|
| Rb (4H1) Mouse mAb (BSA and Azide Free) | 61121 | 100 µg | Mouse IgG2a |
| Phospho-Rb (Ser807/811) (D20B12) XP® Rabbit mAb (BSA and Azide Free) | 41359 | 100 µg | Rabbit IgG |

Description

The Phospho-Rb (Ser807/811) Matched Antibody Pair is ideal for use with immunoassay technologies and high throughput ELISA platforms requiring antibody pairs with specialized or custom antibody labeling. Labels include fluorophores, lanthanides, biotin, and beads. Platforms requiring conjugated Matched Antibody Pairs include MSD, Quanterix Simoa, Alpha Technology (AlphaScreen, AlphaLISA, LANCE, HTRF), and Luminex.

Learn how Matched Antibody Pairs move your projects forward, faster at cst-science.com/matched-antibody-pairs.

Specificity/Sensitivity

This kit detects proteins from the indicated species, as determined through in-house testing, but may also detect homologous proteins from other species.

Storage

Store at -20°C. *This product will freeze at -20°C so it is recommended to aliquot into single-use vials to avoid multiple freeze/thaw cycles.* A slight precipitate may be present and can be dissolved by gently vortexing. This will not interfere with antibody performance.

Directions for Use

Matched Antibody Pairs include capture and detection antibodies to non-overlapping epitopes. Optimal dilutions/concentrations should be determined by the end user.

Formulation

Supplied in 1X PBS (10 mM Na₂HPO₄, 3 mM KCl, 2 mM KH₂PO₄, and 140 mM NaCl (pH 7.4)).

Background

The retinoblastoma tumor suppressor protein Rb regulates cell proliferation by controlling progression through the restriction point within the G1-phase of the cell cycle (1). Rb has three functionally distinct binding domains and interacts with critical regulatory proteins including the E2F family of transcription factors, c-Abl tyrosine kinase, and proteins with a conserved LXCXE motif (2-4). Cell cycle-dependent phosphorylation by a CDK inhibits Rb target binding and allows cell cycle progression (5). Rb inactivation and subsequent cell cycle progression likely requires an initial phosphorylation by cyclin D-CDK4/6 followed by cyclin E-CDK2 phosphorylation (6). Specificity of different CDK/cyclin complexes has been observed *in vitro* (6-8) and cyclin D1 is required for Ser780 phosphorylation *in vivo* (9).

Background References

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4. Hu, Q.J. et al. (1990) *EMBO J* 9, 1147-55.
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6. Lundberg, A.S. and Weinberg, R.A. (1998) *Mol Cell Biol* 18, 753-61.
7. Connell-Crowley, L. et al. (1997) *Mol Biol Cell* 8, 287-301.
8. Kitagawa, M. et al. (1996) *EMBO J* 15, 7060-9.
9. Geng, Y. et al. (2001) *Proc Natl Acad Sci USA* 98, 194-9.

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