

RB2 (Phospho-T986) Rabbit monoclonal antibody

Catalog: MB66297

Host: Rabbit

Reactivity: Human

BackGround:

The retinoblastoma (Rb) tumor suppressor family includes the retinoblastoma protein Rb (p105), retinoblastoma-like protein 1 (RBL1, p107), and retinoblastoma-like protein 2 (RBL2, p130). These Rb family proteins are referred to as 'pocket proteins' because they contain a conserved binding pocket region that interacts with critical regulatory proteins, including E2F family transcription factors, c-Abl tyrosine kinase, and proteins containing a conserved LXCXE motif. In quiescent G0 phase cells, active Rb proteins are hypophosphorylated and bind to E2F transcription factors to repress transcription and inhibit cell cycle progression. Upon growth factor induction of quiescent cells, Rb proteins become hyperphosphorylated and inactivated by G1-phase cyclinD-cdk4/6, G1/S-phase cyclin E-cdk2, and G1/S-phase cyclin A-cdk2 complexes. Hyperphosphorylation of Rb proteins results in a loss of E2F binding and allows for transcriptional activation and cell cycle progression. In addition to regulating the cell cycle, Rb proteins regulate chromosome stability, induction, and maintenance of senescence, apoptosis, cellular differentiation, and angiogenesis. Retinoblastoma-like protein 2 (RBL2, p130) is the most predominant and active Rb family member found in quiescent cells. In these cells, RBL2 interacts with E2F4 and E2F5 to recruit the DP, RB-like, E2F, and MuvB protein (DREAM) complex to E2F target genes to repress transcription of multiple genes required for progression into S phase and mitosis. Hypophosphorylation of RBL2 during cellular senescence is required for maintenance of senescent cells.

Product:

Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl,

50% Glycerol, 0.01% Sodium azide and 0.05% BSA.

Molecular Weight:

~ 130 kDa

Swiss-Prot:

Q08999

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

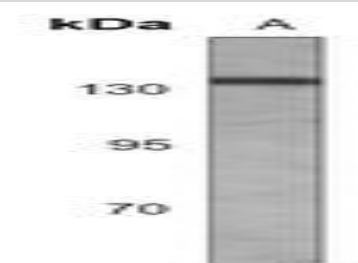
WB (1/500 - 1/1000), IP (1/10 - 1/50)

Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

Specificity:

Recognizes endogenous levels of RB2 (pT986) protein.

DATA:

Western blot analysis of RB2 (pT986) expression in K562 (A) whole cell lysates.

Note:

For research use only, not for use in diagnostic procedure.

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