

Recombinant Rat RB1 protein (His tag)

Catalog No. PDER100076

Note: Centrifuge before opening to ensure complete recovery of vial contents.

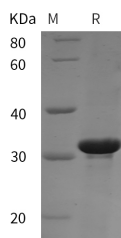
Description

Synonyms	OSRC;osteosarcoma;p105-Rb;pp110;pRb;RB;RB1;retinoblastoma 1;retinoblastoma susceptibility protein;retinoblastoma-associated protein
Species	Rat
Expression Host	E.coli
Sequence	Arg 229-Met 450
Accession	P33568
Calculated Molecular Weight	24.3 kDa
Observed molecular weight	32 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Retinoblastoma 1 protein (RB-1; also retinoblastoma-associated protein, pp110, and p105-Rb) is a 110 kDa tumor suppressor gene and member of the retinoblastoma protein family. Rat RB-1 is 920 amino acids in length. The protein contains a Pocket domain (aa 366-763), which is comprised of two other domains, domain A (aa 366-572) and domain B (aa 632-763), and a “spacer” (aa 573-631). The Pocket domain binds to threonine-phosphorylated domain C (aa 763-920), which thereby prevents interaction with heterodimeric E2F/DP transcription factor complexes. RB-1 is expressed in the retina. The underphosphorylated, active form of RB-1 interacts with E2F1 and represses its transcription activity, leading to cell cycle arrest. Defects in RB-1 lead to the childhood cancer retinoblastoma.