

DESCRIPTION

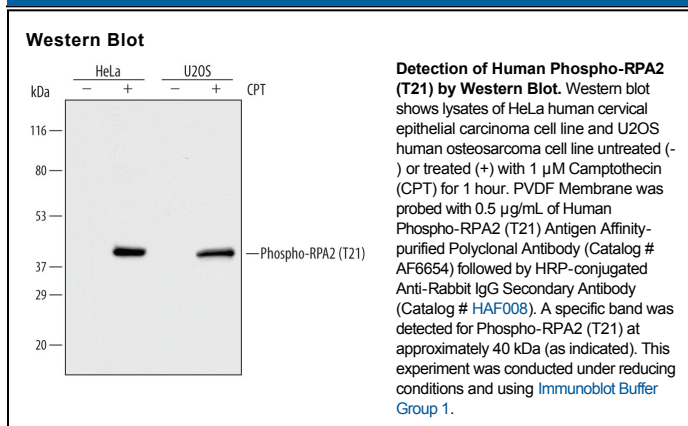
Species Reactivity	Human
Specificity	Detects human RPA2 when phosphorylated at T21.
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	Phosphopeptide containing the human RPA2 T21 site Accession # P15927
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS and Sodium Azide with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

RPA2 (replication protein A 32 kDa subunit; also RFA2 and RPA p34) is a 32 kDa DNA-binding protein that constitutes one of three subunits comprising the PRA heterotrimer complex. In conjunction with 70 kDa RPA1 and 14 kDa RPA3, RPA2 participates in DNA replication, recombination and repair. Human RPA2 is 270 amino acids (aa) in length. It contains a Gly/Ser-rich N-terminus (aa 1-33), a DNA-binding domain (aa 43-171) and a protein-interaction C-terminus (aa 187-270). Phosphorylation of the N-terminus on Ser4/8/23/29/33, plus Thr21, regulates RPA complex interactions with DNA repair and replication complexes. There are multiple splice variants. Three contain N-terminal extensions: one shows an 88 aa insertion after Ser4, another shows a 12 aa substitution for aa 1-4, and a third shows a four aa insertion after Ser4. There is also a deletion of aa 93-98, and a potential truncation after Gln175. Over aa 141-270, human RPA2 shares 83% aa identity with mouse RPA2.