



RAD18 (hHR18, hRAD18, Postreplication Repair Protein hRAD18p, Postreplication Repair Protein RAD18, RAD18 Homolog, RAD18 (S. cerevisiae) Homolog, RING Finger Protein 73, RNF73)

Catalog number

R0445-25B

Supplier

United States Biological

Human Rad18 (hRad18) is homolog of the *S. pombe* Rad18 (3,4). In yeast, Rad6 and Rad18 play a crucial role in post-replication repair functions in gap-filling of a daughter strand on replication of damaged DNA (2). Furthermore, Rad6-Rad18 interaction is thought to be critical at an early step during lesion bypass in yeast. In vivo, Rad18 protein forms a tight complex with Rad6 through a conserved ring-finger motif (3,4). It has been suggested that Rad18-Rad6 complex binds to the damaged sites by the single-stranded DNA binding property of Rad 18. This is followed by degradation of the stalled components of DNA replication by ubiquitin-conjugating enzyme activity of Rad6 (1). The human Rad18 maps on chromosome 3p24-25, the region which is often deleted in lung, breast, ovary, and testis cancers. The human RAD18 gene codes for a protein of 495 amino acids with a predicted molecular weight of 56kD. The human Rad18 is ubiquitously expressed in various human tissues.

Applications

Suitable for use in Western Blot. Other applications not tested.

Recommended Dilution

Optimal dilutions to be determined by the researcher.

Positive Control

HL60

Storage and Stability

May be stored at 4°C for short-term only. For long-term storage and to avoid repeated freezing and thawing, add sterile glycerol (40-50%), aliquot and store at -20°C. Aliquots are stable for at least 3 months at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

Immunogen

Synthetic peptide corresponding to aa402-414 of human Rad18.

Formulation

Supplied as a liquid in PBS, 0.2% gelatin, 0.05% sodium azide.

Purity

Purified by immunoaffinity chromatography.

**Specificity**

Recognizes human Rad18. In HL60, a 54kD band should be detected.

Product Type

Mab

Source

human

Isotype

IgG1

Grade

Affinity Purified

Applications

WB

Crossreactivity

Hu

Storage

-20°C