

# **RAD18 Antibody**

Rabbit mAb Catalog # AP90693

### **Product Information**

ApplicationWB, FCPrimary AccessionQ9NS91

**Reactivity** Rat, Human, Mouse

**Clonality** Monoclonal

Other Names E3 ubiquitin-protein ligase RAD18; hHR18; hRAD18; RAD18, S.

cerevisiae, homolog; RING finger protein 73; RNF73;

IsotypeRabbit IgGHostRabbitCalculated MW56223

#### **Additional Information**

**Dilution** WB 1:10000~1:20000 FC 1:20 **Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human RAD18

**Description** RAD18 a structural maintenance of chromosomes (SMC) protein involved in

postreplication repair of UV-damaged DNA. Has ssDNA binding activity. Interacts with Rad6 through a conserved ring-finger motif. Rad6 is an

ubiquitin-conjugating enzyme required for post-replication repair of damaged

DNA.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **Protein Information**

Name RAD18

Synonyms RNF73

**Function** E3 ubiquitin-protein ligase involved in postreplication repair of UV-damaged

DNA. Postreplication repair functions in gap- filling of a daughter strand on replication of damaged DNA. Associates to the E2 ubiquitin conjugating enzyme UBE2B to form the UBE2B-RAD18 ubiquitin ligase complex involved in

mono-ubiquitination of DNA- associated PCNA on 'Lys-164'. Has ssDNA

binding activity.

**Cellular Location** Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center,

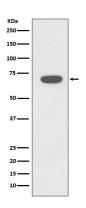
centrosome. Note=Associates with chromatin (PubMed:25931565).

Colocalizes with SLF1 in the nucleus and to centrosomes (PubMed:15632077).

Relocalizes with SLF1 to nuclear foci in response to DNA damage

(PubMed:22036607). Accumulates with the SLF1- SLF2 and SMC5-SMC6 complexes at replication-coupled DNA interstrand repair and DNA double-strand breaks (DSBs) sites on chromatin in a ubiquitin-dependent manner (PubMed:25931565)

## **Images**



Western blot analysis of RAD18 expression in HeLa cell lysate.

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