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Phospho-Rad17 (S656) Antibody

Rabbit mAb Catalog # AP92834

Product Information

Application WB, IHC, IF, ICC, IHF

Primary Accession

Reactivity

Clonality

O75943

Human

Monoclonal

Other Names CCYC; hRad17; R24L; RAD17; Rad24;

IsotypeRabbit IgGHostRabbitCalculated MW77055

Additional Information

Dilution WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human Phospho-Rad17 (S656)

Description Essential for sustained cell growth, maintenance of chromosomal stability,

and ATR-dependent checkpoint activation upon DNA damage. Has a weak ATPase activity required for binding to chromatin. Participates in the recruitment of the RAD1-RAD9-HUS1 complex onto chromatin, and in CHEK1 activation. May also serve as a sensor of DNA replication progression, and

may be involved in homologous recombination.

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 RAD17 {ECO:0000303|PubMed:9878245, ECO:0000312|HGNC:HGNC:9807}

Function Essential for sustained cell growth, maintenance of chromosomal stability,

and ATR-dependent checkpoint activation upon DNA damage (PubMed: 10208430, PubMed: 11418864, PubMed: 11687627, PubMed: 11799063, PubMed: 12672690, PubMed: 14624239,

PubMed:<u>15235112</u>). Has a weak ATPase activity required for binding to chromatin (PubMed:<u>10208430</u>, PubMed:<u>11418864</u>, PubMed:<u>11687627</u>,

PubMed: <u>11799063</u>, PubMed: <u>12672690</u>, PubMed: <u>14624239</u>, PubMed: <u>15235112</u>). Participates in the recruitment of the 9-1-1

(RAD1-RAD9-HUS1) complex and RHNO1 onto chromatin, and in CHEK1 activation (PubMed: 21659603). Involved in homologous recombination by

mediating recruitment of the MRN complex to DNA damage sites (PubMed:<u>24534091</u>). May also serve as a sensor of DNA replication progression (PubMed:<u>12578958</u>, PubMed:<u>14500819</u>, PubMed:<u>15538388</u>).

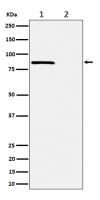
Cellular Location

Nucleus. Chromosome Note=Phosphorylated form redistributes to discrete nuclear foci upon DNA damage (PubMed:11799063). Localizes to DNA double-strand breaks (DSBs) (PubMed:24534091).

Tissue Location

Overexpressed in various cancer cell lines and in colon carcinoma (at protein level). Isoform 2 and isoform 3 are the most abundant isoforms in non irradiated cells (at protein level) Ubiquitous at low levels. Highly expressed in testis, where it is expressed within the germinal epithelium of the seminiferous tubuli Weakly expressed in seminomas (testicular tumors)

Images



Western blot analysis of Phospho-Rad17 (S656) expression in (1) HeLa cell treated with CA lysate; (2) HeLa cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.