Immunotag™ RAD1 Antibody

Antibody Specification

Catalog No.	ITA3305
Product Description	Immunotag™ RAD1 Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	RAD1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	A synthesized peptide
Specificity	RAD1 antibody detects endogenous levels of total RAD1
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Gene Name	RAD1
Accession No.	O60671

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Alternate Names	Cell cycle checkpoint protein Hrad1; Cell cycle checkpoint protein Rad 1 A / B; Cell cycle checkpoint protein RAD1; Checkpoint control protein HRAD1; Checkpoint control protein RAD1; DNA repair exonuclease; DNA repair exonuclease rad1; DNA repair exonuclease rad1 homolog; DNA repair exonuclease REC1; DNA repair protein RAD1; EC 3.1.11.2; Exonuclease homolog RAD1; GTP-binding protein RAD; hRAD 1; hRAD1; MGC77779; RAD 1; RAD; RAD1; RAD1 homolog (S. pombe); RAD1 homolog; Rad1 like DNA damage checkpoint; Rad1 like DNA damage checkpoint protein; RAD1, S. pombe, homolog of; Rad1-like DNA damage checkpoint protein; RAD1_HUMAN; Ras associated with diabetes; REC 1; REC1; RRAD;
Description	Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair (PubMed:10846170, PubMed:10884395). The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex (PubMed:12578958). Acts then as a sliding clamp platform on DNA for several proteins involved in long-patch base excision repair (LP-BER) (PubMed:15871698). The 9-1-1 complex stimulates DNA polymerase beta (POLB) activity by increasing its affinity for the 3'-OH end of the primer-template and stabilizes POLB to those sites where LP-BER proceeds; endonuclease FEN1 cleavage activity on substrates with double, nick, or gap flaps of distinct sequences and lengths; and DNA ligase I (LIG1) on long-patch base excision repair substrates (PubMed:15314187, PubMed:15556996, PubMed:15871698). The 9-1-1 complex is necessary for the recruitment of RHNO1 to sites of double-stranded breaks (DSB) occurring during the S phase (PubMed:21659603). Isoform 1 possesses 3'->5' double stranded DNA exonuclease activity (PubMed:9660799).
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	32 kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.