## 32-4586: Recombinant Human RAD1

Alternative Name :
RAD-1,HRAD1,REC1,Cell cycle checkpoint protein RAD1,hRAD1,EC=3.1.11.2,DNA repair exonuclease rad1 homolog,Rad1-like DNA damage checkpoint protein.

## Description

Source : Escherichia Coli. RAD1 Recombinant Human produced in E.Coli is a single, non-glycosylated polypeptide chain containing 301 amino acids (1-282 a.a.) and having a molecular mass of 33.9 kDa . The RAD1 is fused to 20 amino acid His-Tag at N -terminus and purified by proprietary chromatographic techniques. RAD1 is part of a heterotrimeric cell cycle checkpoint complex, recognized as the 9-1-1 complex, that is activated to stop cell cycle progression in reaction to DNA damage or incomplete DNA replication. RAD1 complex withholds the Rad9 and Hus1 proteins and takes part in cellular responses to DNA damage, by associating with Rad17 and several components of the PCNA-loading heteropentamer, replication factor C. RAD1 takes part in DNA repair and recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex. RAD1 takes part as a sliding clamp platform on DNA for several proteins that play a role in long-patch base excision repair (LP-BER). RAD1 complex stimulates DNA polymerase beta (POLB) activity by raising its affinity for the 3"-OH end of the primer-template and stabilizes POLB to those sites where LP-BER proceeds.

## Product Info

## Amount: $\quad 10 \mu \mathrm{~g}$

Purification: Greater than $90.0 \%$ as determined by SDS-PAGE.

## Content :

Storage condition :

## Amino Acid :

RAD1 Human solution containing 20 mM Tris pH-8, 1 mM DTT, $0.2 \mathrm{M} \mathrm{NaCl} \& 10 \%$ glycerol.
RAD1 Human although stable at $4^{\circ} \mathrm{C}$ for 1 week, should be stored desiccated below $-18^{\circ} \mathrm{C}$. Please prevent freeze thaw cycles.
MGSSHHHHHH SSGLVPRGSH MPLLTQQIQD EDDQYSLVAS LDNVRNLSTI LKAIHFREHA TCFATKNGIK VTVENAKCVQ ANAFIQAGIF QEFKVQEESV TFRINLTVLL DCLSIFGSSP MPGTLTALRM CYQGYGYPLM LFLEEGGVVT VCKINTQEPE ETLDFDFCST NVINKIILQSEGLREAFSEL DMTSEVLQIT MSPDKPYFRL STFGNAGSSH LDYPKDSDLM EAFHCNQTQV NRYKISLLKP STKALVLSCK VSIRTDNRGF LSLQYMIRNE DGQICFVEYY CCPDEEVPES ES.


