

Rad52 Protein (human)

10-003 20ug, 10-004 100ug

Human Rad52 protein plays a major role in genetic recombination and recombination repair by mediating strand-annealing reaction between complementary DNA strands (1). Rad52 functionally and physically interacts with Rad51, Dmc1, and RPA in recombination processes. In radiation damaged cells, Rad52 is phosphorylated at Tyr104 by c-Abl tyrosine kinase and forms nuclear foci (2).

The product was highly purified from *E. coli* over-expressing human Rad52 protein as a recombinant protein (3).

Applications

1) Studies on homologous recombination in mammals including human

2) Studies on the interaction of Rad52 protein with various proteins

3) To be used as a standard for Western blotting

Specification

Purity: > 90% as judged from SDS-PAGE analysis (Fig.1)

Form: 1.0 mg/ml in 20 mM Hepes-KOH, 0.2 M KCl, 0.5 mM EDTA, 1 mM DTT, 10 % Glycerol Storage: -70°C

Data Link UniProtKB/Swiss-Prot P43351 (RAD52_HUMAN)

References: This product was used in reference 3.

- Friedberg EC et al DNA Repair and Mutagenesis 2nd ed., ASM Press (2006)
- Kitao H & Yuan Z M "Regulation of ionizing radiation-induced Rad52 nuclear foci formation by c-Abl-mediated phosphorylation." *J Biol Chem* 277:48944-48948 (2002) PMID: <u>12379650</u>
- 3. Kagawa W *et al* "Homologous pairing promoted by the human Rad52 protein." *J Biol Chem* 276: 35201-35208 (2001) PMID: <u>11454867</u>

Related Products :

- 70-011 Anti-Rad52 (human) rabbit affinity purified antibody
- <u>10-001</u> Rad51 (human) protein
- 70-001 Anti-Rad51 (human) rabbit antiserum
- 70-003 Anti-Rad51 (human) chicken antiserum
- <u>70-005</u> AntiRad51 (human) IgY
- 70-007 Anti-Rad51 (human) IgY-conjugated resin
- <u>70-009</u> Anti-Rad51 (human) IgY, antigen affinity purified

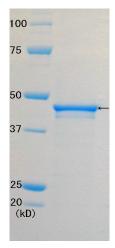


Fig.1 Analysis of purified human Rad52 protein by SDS-PAGE