# Recombinant RDM1 protein (His tag)

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| **Catalog Number** | 545492 |
| **Synonyms** | RAD52 homolog B |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q8NG50 |
| **Molecular Weight** | Predictes a molecular mass of 27.68 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band. |

## Product Information

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| **Sequence Region** | 1-233 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >90%, by SDS-PAGE with Coomassie Brilliant Blue staining. |
| **Endotoxin** | Not tested. |
| **Activity** | Not tested. |
| **Stability** | Samples are stable for up to twelve months from date of receipt at -70℃ |
| **Protein Construction** | DNA encoding 1-233 aa (Q8NG50) were fused with 6His tag. |

## Storage & Handling

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| **Reconstitution** | Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. |
| **Storage** | Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. |
| **Shipping** | In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant Human RAD52 motif-containing protein 1 (RDM1) fragment (amino acids 1-233), encompassing the complete RRM domain. This high-purity protein is an essential tool for investigating DNA/RNA binding mechanisms and cisplatin resistance pathways in cancer research.<br>RAD52 motif-containing protein 1 (RDM1) is a human protein that confers resistance to the antitumor agent cisplatin and demonstrates binding affinity for both DNA and RNA. The protein exhibits complex subcellular localization, with various isoforms present in the nucleus (including nucleoli), cytoplasm, and nuclear bodies such as promyelocytic leukemia (PML) bodies and Cajal bodies. Under proteotoxic stress conditions, including proteasomal inhibition and mild heat-shock, multiple isoforms relocate to nucleolar structures. The full-length protein's association with nuclear bodies is enhanced during cellular stress responses, highlighting its potential role in stress adaptation mechanisms. |