Recombinant RAD9A protein (His tag)

Catalog Number	541103
Synonyms	hRAD9; DNA repair exonuclease rad9 homolog A
Species	Human
Expression System	E. coli
Accession	Q99638
Molecular Weight	Predictes a molecular mass of 31.06 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	1-267
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-267 aa (Q99638) were fused with 6His tag.

Storage & Handling

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. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human RAD9A (Cell cycle checkpoint control protein RAD9A) fragment (amino acids 1-267) is a high-purity, stable protein designed for structural and biochemical studies. This soluble fragment retains key functional characteristics, making it an ideal tool for investigating DNA repair mechanisms and cell cycle regulation in life science research. Cell cycle checkpoint control protein RAD9A is a crucial component of the 9-1-1 complex, which plays a major role in DNA damage response and repair. It functions as a sliding clamp platform that recruits and stabilizes DNA repair proteins like POLB, FEN1, and LIG1 during long-patch base excision repair. RAD9A also exhibits 3'→5' double-stranded DNA exonuclease activity and is essential for RHNO1 recruitment to double-stranded breaks during S phase. The protein localizes to the nucleus, where it participates in maintaining genomic integrity through checkpoint signaling and DNA damage repair pathways.