Recombinant RNH2B protein (His tag)

Catalog Number	542848
Synonyms	RNase H2 subunit B; Aicardi-Goutieres syndrome 2 protein; AGS2; Deleted in lymphocytic leukemia 8; Ribonuclease HI subunit B
Species	Human
Expression System	E. coli
Accession	Q5TBB1
Molecular Weight	Predictes a molecular mass of 27.96 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	2-233
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 2-233 aa (Q5TBB1) 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 Ribonuclease H2 subunit B (RNase H2 subunit B) fragment (amino acids 2-233), a high-quality protein designed for structural and biochemical studies. This 232-amino acid fragment represents a stable and soluble unit, ideal for investigating RNA:DNA hybrid degradation and its role in DNA replication and genome integrity. Ribonuclease H2 subunit B is a non-catalytic component of the RNase H2 complex, an endonuclease that specifically degrades RNA within RNA:DNA hybrids. It plays a critical role in DNA replication, potentially by removing lagging-strand Okazaki fragment RNA primers, and facilitates the excision of single ribonucleotides from DNA:RNA duplexes. The protein is localized to the nucleus, underscoring its importance in nucleic acid metabolism and genome maintenance. Mutations in RNASEH2B are associated with Aicardi-Goutieres syndrome 2, highlighting its significance in human health and disease.