

Product Data Sheet

Angiogenin Protein, Human (His)

Cat. No.: HY-P700644

Synonyms: rHuAngiogenin; ANG; RNASE5; Angiogenin

Species: Human Source: E. coli

P03950 (D26-P147) Accession:

Gene ID: 283 18.0 kDa Molecular Weight:

PROPERTIES

AA Sequence

DNSRYTHFLT QHYDAKPQGR DDRYCESIMR RRGLTSPCKD INTFIHGNKR SIKAICENKN GNPHRENLRI SKSSFQVTTC KLHGGSPWPP CQYRATAGFR NVVVACENGL PVHLDQSIFR

RΡ

Biological Activity The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

Lyophilized powder. **Appearance**

Formulation Lyophilized a 0.22 μm filtered solution of Tris-based buffer,50% glycerol.

Endotoxin Level <1 EU/ug, determined by LAL method.

Reconsititution It is not recommended to reconstitute to a concentration less than 100 $\mu g/mL$ in ddH₂O.

Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

Angiogenin protein, a ribonuclease, demonstrates the ability to cleave tRNA within anticodon loops, producing tRNAderived stress-induced fragments (tiRNAs). These tiRNAs play a crucial role in inhibiting protein synthesis and triggering the assembly of stress granules (SGs). Additionally, Angiogenin binds to actin on the surface of endothelial cells, and upon binding, it is endocytosed and translocated to the nucleus. In the nucleus, Angiogenin stimulates ribosomal RNA synthesis, including the initiation site sequences of 45S rRNA. Furthermore, Angiogenin exhibits angiogenic activity, promoting vascularization in both normal and malignant tissues. This angiogenic function is intricately regulated by its interaction with RNH1 in vivo. Structurally, Angiogenin forms homodimers and interacts with RNH1 to create tight 1:1 complexes, with the

possibility of dimerization involving two such complexes.

Caution: Product has not been fully validated for medical applications. For research use only.

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