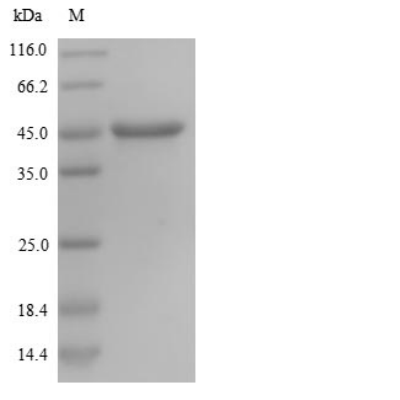
Recombinant Human Nestin (NES), partial

Product Code	CSB-YP015713HU
Relevance	Required for brain and eye development. Promotes the disassbly of phosphorylated vimentin intermediate filaments (IF) during mitosis and may play a role in the trafficking and distribution of IF proteins and other cellular factors to daughter cells during progenitor cell division. Required for survival, renewal and mitogen-stimulated proliferation of neural progenitor cells .
Abbreviation	Recombinant Human NES protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P48681
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	PPPQGETGKEGWDPAVLASEGLEAPPSEKEEGEEGEEECGRDSDLSEEFED LGTEAPFLPGVPGEVAEPLGQVPQLLLDPAAWDRDGESDGFADEEESGEEGE EDQEEGREPGAGRWGPGSSVGSLQALSSSQRGEFLESDSVSVSVPWDDSL RGAVAGAPKTALETESQDSAEPSGSEEESDPVSLEREDKVPGPLEIPSGMED AGPGADIIGVNGQGPNLEGKSQHVNGGVMNGLEQSEEVGQGMPL
Research Area	Neuroscience
Source	Yeast
Target Names	NES
Protein Names	Recommended name: Nestin
Expression Region	1321-1569aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	27.8kDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant Human NES was expressed with the amino acid range of 1321-1569. The expected molecular weight for the NES protein is calculated to be 27.8 kDa. This NES protein is produced using yeast expression system. The NES gene fragment has been modified by fusing the N-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant NES protein during the following stages.

The human Nestin (NES), an intermediate filament protein, is a marker for neural stem and progenitor cells. NES plays a crucial role in maintaining the structural integrity of neural cells during development and in adult tissues. NES is prominently expressed in various regions of the developing nervous system, such as the neural tube, where it contributes to the formation and maintenance of neuroepithelial cells. In adult tissues, NES expression is often associated with areas of active neurogenesis and tissue repair. Beyond its role as a structural protein, NES is considered a marker for neural stem cells and is involved in regulating cell proliferation and differentiation in response to developmental signals and injury. Research on NES spans neurodevelopment, neural stem cell biology, and its potential implications in neurodegenerative diseases and regenerative medicine.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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