Recombinant FSHB protein (His tag)

Catalog Number	541978
Synonyms	Follicle-stimulating hormone beta subunit; FSH-B; FSH-beta; Follitropin beta chain
Species	Human
Expression System	E. coli
Accession	P01225
Molecular Weight	Predictes a molecular mass of 14.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	19-129
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 19-129 aa (P01225) 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 Follitropin subunit beta (FSH-B) fragment (amino acids 19-129) is a high-quality protein preparation designed for research applications. This 111-amino acid fragment represents a stable and soluble domain of the follicle-stimulating hormone beta subunit, optimized for structural studies and biochemical characterization of this critical reproductive hormone component. The full-length Follitropin subunit beta (FSH-B) combines with the alpha chain (CGA) to form follitropin, the follicle-stimulating hormone, which provides biological specificity to the hormone heterodimer. FSH-B binds to the FSHR G protein-coupled receptor on target cells, activating downstream signaling pathways essential for reproductive function. This hormone plays crucial roles in follicle development in females and spermatogenesis in males. As a secreted protein, efficient secretion of FSH-B requires dimerization with CGA. The selected fragment (19-129) encompasses the core functional domain, making it valuable for studying FSH receptor interactions and hormone signaling mechanisms without the complications of full heterodimer formation.