Recombinant CENPI protein (His tag)

Catalog Number	545596
Synonyms	CENP-I; FSH primary response protein 1; Follicle-stimulating hormone primary response protein; Interphase centromere complex protein 19; Leucine-rich primary response protein 1
Species	Human
Expression System	E. coli
Accession	Q92674
Molecular Weight	Predictes a molecular mass of 53.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 54 kDa band.

Product Information

Sequence Region	310-756
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 310-756 aa (Q92674) 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	This recombinant protein product features a stable and soluble fragment (residues 310-756) of Human Centromere protein I (CENP-I), a key component of the centromere complex essential for kinetochore assembly and mitotic chromosome segregation. The fragment is optimized for structural and biochemical studies, offering researchers a reliable tool for investigating centromere biology and cell division mechanisms. Centromere protein I (CENP-I) is a critical nuclear protein that localizes exclusively to centromeres and functions as part of the CENPA-CAD complex. It plays a vital role in kinetochore assembly, mitotic progression, and chromosome segregation by facilitating the incorporation of newly synthesized CENPA into centromeres and enabling proper localization of key proteins like CENPF, MAD1L1, and MAD2 to kinetochores. Additionally, CENP-I is involved in the gonadal tissue response to follicle-stimulating hormone, highlighting its importance in both cell division and reproductive physiology. The protein's specific centromeric localization and complex interactions make it fundamental to understanding chromosomal stability and cell division processes.