Recombinant Human SPESP1

Catalog No: C683

Description	Recombinant Human Sperm Equatorial Segment Protein 1 is produced by our Mammalian expression system and the target gene encoding Tyr20-Tyr350 is expressed with a 6His tag at the C-terminus.
Source	Human Cells
Alternative name	Sperm Equatorial Segment Protein 1; ESP; Equatorial Segment Protein; SP-ESP; Glycosylated 38 kDa Sperm Protein C-7/8; SPESP1
Accession No.	Q6UW49
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM PB,150mM NaCl, pH7.4.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Quality Control	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Amino Acid Sequence	YPSITVTPDEEQNLNHYIQVLENLVRSVPSGEPGREKKSNSPKHVYSIASKGSKFKELVTHGDASTENDVLTN PISEETTTFPTGGF TPEIGKKKHTESTPFWSIKPNNVSIVLHAEEPYIENEEPEPEPEPAAKQTEAPRMLPVVTESSTSPYVTSYKS PVTTLDKSTGIGIST ESEDVPQLSGETAIEKPEEFGKHPESWNNDDILKKILDINSQVQQALLSDTSNPAYREDIEASKDHLKRSLAL AAAAEHKLKTMY KSQLLPVGRTSNKIDDIETVINMLCNSRSKLYEYLDIKCVPPEMREKAATVFNTLKNMCRSRRVTALLKVYVD HHHHHH
Background	Sperm Equatorial Segment Protein 1 (SPESP1) is a member of the SPESP1 family. SPESP1 is highly expressed in the testis, where it is localized to the acrosome of postmeiotic stages of spermiogenesis; it is expressed at lower levels in the placenta and fetal lung. SPESP1 is involved in the multicellular organisimal development. Disruption of SPESP1 leads to abnormal distribution of sperm proteins resulting in a detached membrane from the equatorial segment and less fertile sperm. SPESP1 may interact with IZUMO1 and MN9 antigen and it contains an N-glycosylation site as well as several cAMP-dependent kinase, protein kinase C, and casein kinase II consensus phosphorylation sites.

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