PRODUCT INFORMATION

Expression system E.coli

Domain 1-151aa

UniProt No. Q15506

NCBI Accession No. NP_059121

Alternative Names Sperm surface protein Sp17, CT22, SP17, SP17-1

PRODUCT SPECIFICATION

Molecular Weight

19.8 kDa (174aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

Concentration 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT

Purity

> 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

SPA17 is a protein present at the cell surface. The N-terminus has sequence similarity to human cAMPdependent protein kinase A (PKA) type II alpha regulatory subunit (RIIa) while the C-terminus has an IQ calmodulin-binding motif. The central portion of the protein has carbohydrate binding motifs and likely functions in cell-cell adhesion. The protein was initially characterized by its involvement in the binding of sperm to the zona pellucida of the oocyte. Recent studies indicate that it is also involved in additional cell-cell adhesion functions such as immune cell migration and metastasis. Recombinant human SPA17 protein, fused to His-tag at



N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSMSIPFSN THYRIPQGFG NLLEGLTREI LREQPDNIPA FAAAYFESLL EKREKTNFDP AEWGSKVEDR FYNNHAFEEQ EPPEKSDPKQ EESQISGKEE ETSVTILDSS EEDKEKEEVA AVKIQAAFRG HIAREEAKKM KTNSLQNEEK EENK

General References

Buchli R., et al. (2002) Biochim. Biophys. Acta. 1578:29-42 Li Z., et al. (2007) Int. J. Cancer. 121:1507-1511

DATA





3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)

