

Human SP-10 / ACRV1 Protein (His Tag)

Catalog Number: 11789-H08H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

D11S4365, SP-10, SPACA2

Protein Construction:

A DNA sequence encoding the mature form of human ACRV1 isoform 1 (P26436-1) (Gln 22-Ile 265) was fused with a polyhistidine tag at the C-terminus and a signal peptide at the N-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Gln 22

Molecular Mass:

The recombinant human ACRV1 consists of 255 amino acids and predicts a molecular mass of 27.3 kDa. In SDS-PAGE under reducing conditions, rhACRV1 migrates as an approximately 38 kDa band due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

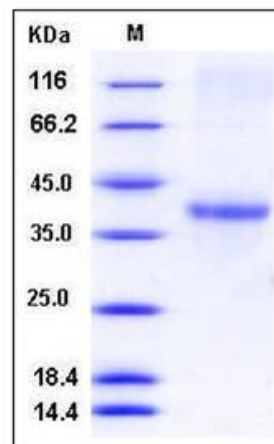
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Acrosomal protein SP-10, also known as Acrosomal vesicle protein 1 and ACRV1, is a testis-specific, differentiation antigen, that arises within the acrosomal vesicle during spermatogenesis, and is associated with the acrosomal membranes and matrix of mature sperm. Regulation of cell type-specific gene transcription is central to cellular differentiation and development. During spermatogenesis, a number of testis-specific genes are expressed in a precise spatiotemporal order. The longest transcript of ACRV1 / SP-10 is the most abundant, comprising 53-72% of the total acrosomal vesicle protein 1 messages; the second largest transcript comprises 15-32%; the third and the fourth largest transcripts account for 3.4-8.3% and 8.7-12.5%, respectively; and the remaining transcripts combined account for < 1% of the total acrosomal vesicle protein 1 message. ACRV1 / SP-10 is a testis-specific acrosomal protein that has been detected in several species including humans. It may be involved in sperm-zona binding or penetration, and it is a potential contraceptive vaccine immunogen for humans. ACRV1 / SP-10 may be involved in sperm-zona binding or penetration. It is also an intra-acrosomal protein that is considered to be a vaccine candidate for immunocontraception.

References

1. Wright RM, et al., 1990, Biol Reprod. 42 (4): 693-701.
2. Kurth, B.E. et al., 1993, Anat Rec. 236 (4): 619-25.
3. Golden WL, et al., 1994, Genomics. 18 (2): 446-9.
4. Foster, J.A. et al., 1994, Biol Reprod. 51 (6): 1222-31.
5. Abhyankar, M.M. et al., 2007, J Biol Chem. 282 (50): 36143-54.

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Fax : +86-10-51029969 • Tel: +86-400-890-9989 • <http://www.sinobiological.com>