



# Recombinant Human SP-10/ACRV1 Protein [His] (DAGC352)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	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.
<b>Species</b>	Human
<b>Purity</b>	> 90 % as determined by SDS-PAGE
<b>Conjugate</b>	His
<b>Applications</b>	ELISA
<b>Predicted N terminal</b>	Gln 22
<b>Molecular Weight</b>	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.
<b>Endotoxin</b>	< 1.0 EU per ug of the protein as determined by the LAL method
<b>Format</b>	Lyophilized
<b>Size</b>	100 µg
<b>Buffer</b>	Lyophilized from sterile PBS, pH 7.4
<b>Preservative</b>	None
<b>Storage</b>	Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

# BACKGROUND

Introduction	Acrosomal protein SP-1, 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-1 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-1 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-1 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.
Keywords	ACRV1; acrosomal vesicle protein 1; SP-10; SPACA2; D11S4365; acrosomal protein SP-10; sperm protein 10