abcam

Product datasheet

Recombinant Human Steroidogenic Factor 1/SF-1 protein ab114599

1 Image

Description

Product name Recombinant Human Steroidogenic Factor 1/SF-1 protein

Expression system Wheat germ
Accession Q13285

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MDYSYDEDLDELCPVCGDKVSGYHYGLLTCESCKGFFKR

TVQNNKHYTCT

ESQSCKIDKTQRKRCPFCRFQKCLTVGMRLEAVRADRMR

GGRNKFGPMYK

RDRALKQQKKAQIRANGFKLETGPPMGVPPPPPAPDYV

LPPSLHGPEPK

GLAAGPPAGPLGDFGAPALPMAVPGAHGPLAGYLYPAFP

GRAIKSEYPEP

YASPPQPGLPYGYPEPFSGGPNVPELILQLLQLEPDEDQV

RARILGCLQE

PTKSRPDQPAAFGLLCRMADQTFISIVDWARRCMVFKEL

EVADQMTLLQN

CWSELLVFDHIYRQVQHGKEGSILLVTGQEVELTTVATQA

GSLLHSLVLR

AQELVLQLLALQLDRQEFVCLKFIILFSLDLKFLNNHILVKD

AQEKANAA

LLDYTLCHYPHCGDKFQQLLLCLVEVRALSMQAKEYLYHK

HLGNEMPRNN LLIEMLQAKQT

Predicted molecular weight 77 kDa including tags

Amino acids 1 to 461

Specifications

Our Abpromise guarantee covers the use of ab114599 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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Applications ELISA

SDS-PAGE

Western blot

Form Liquid

Additional notes This product was previously labelled as Steroidogenic Factor 1.

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.3% Glutathione, 0.79% Tris HCI

General Info

Function

Transcriptional activator. Seems to be essential for sexual differentiation and formation of the primary steroidogenic tissues. Binds to the Ad4 site found in the promoter region of steroidogenic P450 genes such as CYP11A, CYP11B and CYP21B. Also regulates the AMH/Muellerian inhibiting substance gene as well as the AHCH and STAR genes. 5'-YCAAGGYC-3' and 5'-RRAGGTCA-3' are the consensus sequences for the recognition by NR5A1. The SFPQ-NONO-NR5A1 complex binds to the CYP17 promoter and regulates basal and cAMP-dependent transcriptional avtivity. Binds phosphatidylcholine (By similarity). Binds phospholipids with a phosphatidylinositol (PI) headgroup, in particular PI(3,4)P2 and PI(3,4,5)P3.

Involvement in disease

Defects in NR5A1 are a cause of 46,XY disorder of sex development (46,XY DSD) [MIM:612965]; also known as XY sex reversal with or without adrenal failure. A congenital condition in which development of chromosomal, gonadal, or antomic sex is atypical. 46,XY DSD is a disorder of gonadal (testicular) development, which may be complete or partial. The complete form includes streak gonads, normal mullerian structures, and normal female external genitalia. The partial form includes ambiguous external genitalia and partial development of mullerian and wolffian structures.

Defects in NR5A1 are a cause of adrenocortical insufficiency without ovarian defect (ACIWOD) [MIM:184757]. ACIWOD is characterized by severe 'slackness' muscular hypotonia. There is decreased sodium, increased potassium and elevated ACTH.

Defects in NR5A1 are the cause of premature ovarian failure type 7 (POF7) [MIM:612964]. An ovarian disorder defined as the cessation of ovarian function under the age of 40 years. It is characterized by oligomenorrhea or amenorrhea, in the presence of elevated levels of serum gonadotropins and low estradiol.

Sequence similarities

Belongs to the nuclear hormone receptor family. NR5 subfamily.

Contains 1 nuclear receptor DNA-binding domain.

Post-translational

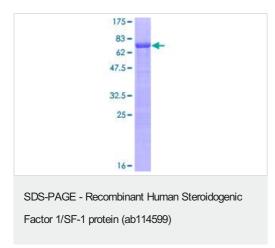
modifications

Acetylation stimulates the transcriptional activity.

Cellular localization

Nucleus.

Images



ab114599 analysed on a 12.5% SDS-PAGE gel stained with Coomassie Blue.

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