Datasheet for ABIN7196642

JAG1 Protein (His tag)

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Overview

Quantity:	50 µg
Target:	JAG1
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This JAG1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Jagged 1/JAG1 Protein (His Tag)(Active)
Sequence:	Met 1-Ser 1046
Characteristics:	A DNA sequence encoding the human JAG1 (NP_000205.1) extracellular domain (Met 1-Ser 1046) was expressed, fused with a polyhistidine tag at the C-terminus.
Purity:	> 85 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by the ability of the immobilized protein to enhance BMP2-induced alkaline phosphatase activity in C3H10T1/2 mouse embryonic fibroblast cells.The ED50 for this effect is typically 4-20 µg/mL.

Target Details

Target:	JAG1

Target Details

Alternative Name:	Jagged 1/JAG1 (JAG1 Products)
Background:	Background: Protein Jagged 1, also known as JAG1, JAGL1 and CD339, is a single-pass type I membrane protein which contains 1 DSL domain and 15 EGF-like domains. JAG1/Jagged 1 is widely expressed in adult and fetal tissues. The expression of JAG1/Jagged 1 is up-regulated in cervical squamous cell carcinoma. JAG1/Jagged 1 is also expressed in bone marrow cell line HS-27a which supports the long-term maintenance of immature progenitor cells. JAG1/Jagged 1 is a ligand for multiple Notch receptors. It is involved in the mediation of Notch signaling. JAG1/Jagged 1 may be involved in cell-fate decisions during hematopoiesis. JAG1/Jagged 1 seems to be involved in early and late stages of mammalian cardiovascular development. It inhibits myoblast differentiation and enhances fibroblast growth factor-induced angiogenesis. Defects in JAG1/Jagged 1 are the cause of Alagille syndrome type 1 (ALGS1). Alagille syndrome is an autosomal dominant multisystem disorder defined clinically by hepatic bile duct paucity and cholestasis in association with cardiac, skeletal, and ophthalmologic manifestations. Defects in JAG1/Jagged 1 are also a cause of tetralogy of Fallot (TOF). TOF is a congenital heart anomaly which consists of pulmonary stenosis, ventricular septal defect, dextroposition of the aorta (aorta is on the right side instead of the left) and hypertrophy of the right ventricle. This condition results in a blue baby at birth due to inadequate oxygenation. Synonym: Protein jagged-1 I; Jagged-1; JAGL1; HJ1; JAG1 and CD339;AGS;AHD;AWS;Jagged 1
Molecular Weight:	112 kDa
NCBI Accession:	NP_000205
Pathways:	Notch Signaling, Stem Cell Maintenance

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted

samples are stable at < -20°C for 3 months.

