Recombinant Protein Technical Manual

Recombinant Human Jagged 1/JAG1 Protein (His Tag)(Active)

RPES0405

Product Data:

Product SKU: RPES0405

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_000205.1

Protein Information:

Molecular Mass: 112 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity: 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.

Purity: > 85 % as determined by reducing SDS-PAGE.

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

Storage: 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Protein jagged I; Jagged; JAGL1; HJ1; JAG1 and CD339;AGS;AHD;AWS;Jagged 1

Immunogen Information:

Sequence: Met 1-Ser 1046

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.