



Recombinant Protein Technical Manual

Recombinant Human FLRT3 Protein (His Tag)(Active)

RPES1837

Product Data:

Product SKU: RPES1837

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_938205.1

Protein Information:

Molecular Mass: 58 kDa

AP Molecular Mass: 60-70 kDa

Tag: C-His

Bio-activity: Measured by the ability of the immobilized protein to support the adhesion of Neuro-2A mouse neuroblastoma cells. When cells are added to coated plates(5µg/mL, 100µL/well), approximately 50%-70% will adhere after 1 hour at 37°C.

Purity: > 98 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C 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: Leucine-Rich Repeat Transmembrane Protein FLRT3; Fibronectin-Like Domain-Containing Leucine-Rich Transmembrane Protein 3; FLRT3; KIAA1469;HH21

Immunogen Information:

Sequence: Met 1-Pro 528

Background:

Leucine-rich repeat transmembrane protein FLRT3, also known as Fibronectin-like domain-containing leucine-rich transmembrane protein 3, and FLRT3, is a single-pass type I membrane protein which belongs to the fibronectin leucine rich transmembrane protein (FLRT) family. FLRT3 contains one fibronectin type-III domain and ten LRR (leucine-rich) repeats and is expressed in kidney, brain, pancreas, skeletal muscle, lung, liver, placenta, and heart. It has a provocative expression pattern during somite development being expressed in regions of the somite where muscle precursor cells migrate from the dermomyotome and move into the myotome, and later in myotomal precursors destined to migrate towards their final destination. FLRT1, FLRT2 and FLRT3 are members of the FLRT family. The FLRT family of leucine-rich repeat (LRR) proteins is implicated in fibroblast growth factor (FGF) signalling, early embryonic development and neurite outgrowth. FLRT3 shares 55% amino acid sequence identity with FLRT1 and 44% identity with FLRT2. Two alternatively spliced transcript variants encoding the same protein have been described. The expression of FLRT3 is controlled by fibroblast growth factors (FGFs). FLRT3 has been implicated in neurite outgrowth after nerve damage, as a positive regulator of FGF signalling and in homotypic cell adhesion. FLRT3 may have a crucial role in regulating cellular adhesion between the epithelial apical ridge and the underlying mesenchyme and in establishing the dorso-ventral position of the ridge.