



Recombinant Protein Technical Manual

Recombinant Human FLRT2 Protein (His Tag)(Active)

RPES2180

Product Data:

Product SKU: RPES2180

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: O43155

Protein Information:

Molecular Mass: 57.7 kDa

AP Molecular Mass:

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 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°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 FLRT2; Fibronectin-Like Domain-Containing Leucine-Rich Transmembrane Protein 2; FLRT2; KIAA0405

Immunogen Information:

Sequence: Met 1-Ser 539

Background:

Fibronectin Leucine-Rich Transmembrane (FLRT) proteins are glycosylated membrane proteins expressed at the cell surface which localise in a homophilic manner to cell-cell contacts expressing the focal adhesion marker vinculin. FLRT1, FLRT2, and FLRT3, the three genes encode putative type I transmembrane proteins, each containing 10 leucine-rich repeats (LRR), a type III fibronectin (FN) domain, followed by the transmembrane region, and a short cytoplasmic tail. FLRT family members may function in cell adhesion and/or receptor signalling. Each member of the FLRT family has a distinct, highly regulated expression pattern, as was seen for the NLRR family. FLRT2 is expressed in a subset of the sclerotome, adjacent to the region that forms the syndetome, suggesting that interaction with FGF signalling may be a general property of FLRT proteins. All FLRTs can interact with FGFR1 and FLRTs can be induced by the activation of FGF signalling by FGF-2. FLRT proteins have a dual role, promoting FGF signalling and modulating homotypic cell adhesion. FLRT2 played critical roles in craniofacial development, and it was also present in the vomeronasal organ, mandibular primordia, and the posterior aspects of the unfused and fused secondary palatal shelves.