Recombinant Protein Technical Manual

Recombinant Human LEFTY2 Protein (His Tag)

RPES3222

Product Data:

Product SKU: RPES3222

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: O00292

Protein Information:

Molecular Mass: 39.1 kDa

AP Molecular Mass: 45-50 kDa

Tag: N-6His

Bio-activity:

Purity: > 90 % 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℃ 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 a 0.2 µm filtered solution of PBS, pH7.4.

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

Application:

Synonyms: Left-right determination factor 2; Endometrial bleeding-associated factor; Left-right determination factor A; Protein lefty-2; Protein lefty-A; Transforming growth factor beta-4; TGF-beta-4; LEFTY2; EBAF; LEFTA; LEFTYA; TGFB4

Immunogen Information:

Sequence: Phe78-Pro366

Background:

Left-right determination factor 2(LEFTY2) is a secreted protein which belongs to the TGF-beta family. Lefty was first identified in a screen for undifferentiated cell-specific cDNAs from the P19 mouse embryonal carcinoma cells. Its mRNA expression on the left side of the developing embryo earned the name “Lefty”. The human orthologue was initially identified as Ebaf, Endometrial bleeding associated factor. Lefty contains the six cysteine residues that are conserved among TGF-β related proteins and that are necessary to form the cysteineknot structure. Its function in patterning left-right asymmetry of the developing organ systems such as the heart and lung is consistent in all vertebrate species examined. Lefty acts as an antagonist to Nodal signaling, potentially by competing for binding to a common receptor. It may play a role in endometrial bleeding.