

32-8847: Recombinant Human Left-right Determination Factor 1 (N-6His)(Discontinued)

Gene : FGF2
Gene ID : 2247
Uniprot ID : P09038

Description

Source: Human Cells.
MW :39.2kD.

Recombinant Human Left-right Determination Factor 1 is produced by our Mammalian expression system and the target gene encoding Phe78-Pro366 is expressed with a 6His tag at the N-terminus. 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 it the name "Lefty". Two genes exist in mouse (Lefty-1 and Lefty-2) and two in humans (Lefty-A(ebaf) and Lefty-B). Lefty contains the six cysteine residues that are conserved among TGF- β related proteins and that are necessary to form the cysteine-knot structure. Lefty homologues have been identified in other vertebrate organisms including chick, frog, and zebrafish. Although the amino acid sequence identity is not well conserved among vertebrate species, the expression pattern of lefty on the left side is well conserved. Lefty-1 is expressed strongly on the left side of the prospective floor plate and weakly in the left half of the lateral plate mesoderm in E8 mice embryos. In all species examined, lefty proteins function in patterning left-right asymmetry of the developing organ systems such as the heart and lung. Lefty acts as an antagonist to Nodal signaling, potentially by competing for binding to a common receptor.

Product Info

Amount : 10 μ g / 50 μ g
Content : Lyophilized from a 0.2 μ m filtered solution of PBS, pH7.4.
Storage condition : Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.
Amino Acid : LTGEQILGSLQLQDQPPVLDKADVEGMVIPSHVVRTQYVALLQHSASRSRGRHHHHHFSQSFREVAG
RFLALEASTHLLVFGMEQRLPPNSELVQAVLRLFQEPVPKAAALHRHGRLSPRSARARVTVEWLRVRDDGSNRT
SLIDSRLSVHESGWKAFDVTEAVNFWQQLSRPROPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEP
QLELHTLDLGDYGAQGDCEAPMTEGTRCCQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCTCRQPPEAL
AFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSPLNMRVQKSCASDGLVPRRLQP

Application Note

Endotoxin : Less than 0.1 ng/ μ g (1 IEU/ μ g) as determined by LAL test.