

## 32-8935: Recombinant Human Left-right Determination Factor 2/Lefty-A(N-6His)

**Gene :** LEFTY2  
**Gene ID :** 7044  
**Uniprot ID :** O00292

### Description

Source: Human Cells.  
MW :39.1kD.

Recombinant Human Left-right Determination Factor 2 is produced by our Mammalian expression system and the target gene encoding Phe78-Pro366 is expressed fused with a Mouse Lefty-1 Propeptide (Leu22-Arg77) & 6His tag at the N-terminus. 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- beta related proteins and that are necessary to form the cysteine knot 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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm 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 :** LTGEQILGSLQLQLDQPPVLDKADVEGMVIPSHVRTQYVALLQSHASRSRGKRHHHHHHFSQSFREVAG  
RFLASEASTHLLVFGMEQRLPPNSELVQAVLRLFQEPVPKALHRHGRLSPRSAQARVTVEWLRVRDDGSNRT  
SLIDSRLVSVHESGWKAFDVTEAVNFWQQLSRPQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEP  
QLELHTLDRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWWLEPPGFLAYECVGTCCQPPEAL  
AFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALVPRRLQP

### Application Note

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