## **Elabscience**®

### Recombinant Human LEFTY2 Protein (His Tag)

#### Catalog Number: PKSH032686

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	HEK293 Cells-derived Human LEFTY2 protein Phe78-Pro366, with an N-terminal His
Calculated MW	39.1 kDa
Observed MW	45-50 kDa
Accession	O00292
Bio-activity	Not validated for activity
Properties	
Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM Histidine-HCl, 4% Sucrose,
	4% Mannitol, 0.1% Tween 80, pH6.0.
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

#### Data



> 90 % as determined by reducing SDS-PAGE.

Background

# **Elabscience**®

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 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.