

### **Synonym**

HTX5

## Source

Human NODAL Protein, Tag Free(NOL-H5133) is expressed from E. coli cells. It contains AA His 238 - Leu 347 (Accession # Q96S42).

Predicted N-terminus: Met

#### **Molecular Characterization**

# NODAL(His 238 - Leu 347) Q96S42

This protein carries no "tag".

The protein has a calculated MW of 12.9 kDa. The protein migrates as 14-15 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE).

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

# **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in 10~mM Sodium citrate, pH3.0 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

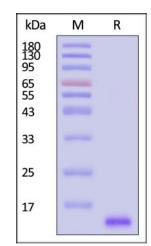
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human NODAL Protein, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

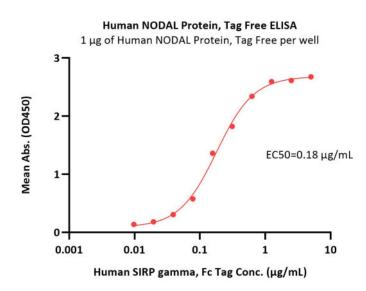
## **Bioactivity-ELISA**



# **Human NODAL Protein, Tag Free**

Catalog # NOL-H5133





Immobilized Human NODAL Protein, Tag Free (Cat. No. NOL-H5133) at 10  $\mu$ g/mL (100  $\mu$ L/well) can bind Human SIRP gamma, Fc Tag (Cat. No. SIG-H5253) with a linear range of 0.01-0.625  $\mu$ g/mL (QC tested).

# Background

This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate the mature protein, which regulates early embryonic development. This protein is required for maintenance of human embryonic stem cell pluripotency and may play a role in human placental development. Mutations in this gene are associated with heterotaxy, a condition characterized by random orientation of visceral organs with respect to the left-right axis. [provided by RefSeq, Aug 2016]

# **Clinical and Translational Updates**

