

Human NODAL Protein, Tag Free

Catalog # NOL-H5133



BIOSYSTEMS
Acro

Synonyms

NODAL

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 [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm 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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

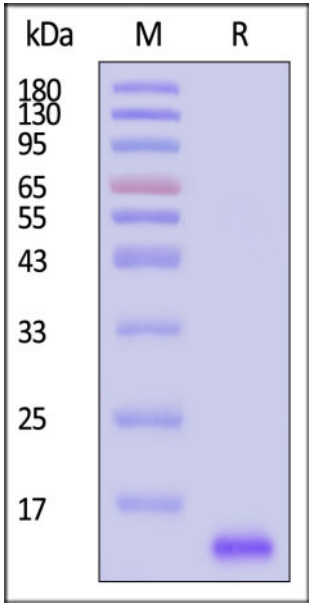
This product is stable after storage at:

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

ACRO Quality Management System

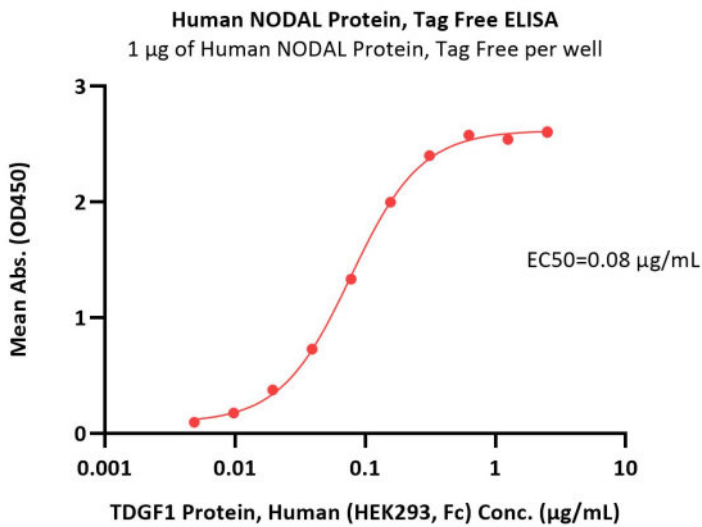
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE

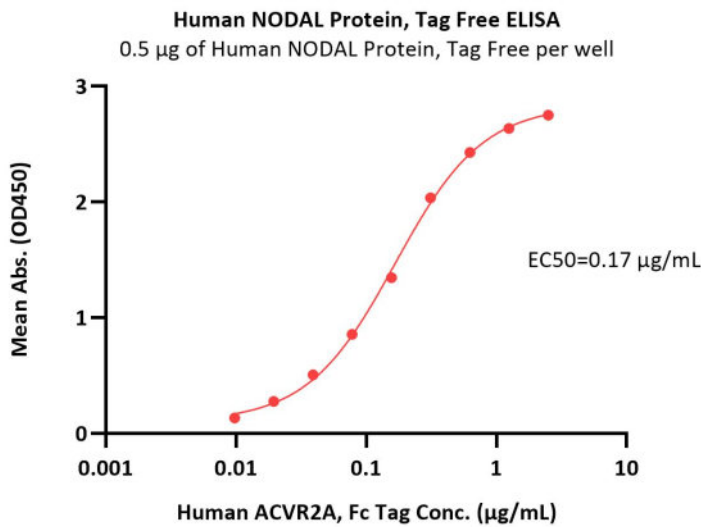


Human NODAL Protein, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA



Immobilized Human NODAL Protein, Tag Free (Cat. No. NOL-H5133) at 10 µg/mL (100 µL/well) can bind TDGF1 Protein, Human (HEK293, Fc) with a linear range of 0.005-0.313 µg/mL (QC tested).



Immobilized Human NODAL Protein, Tag Free (Cat. No. NOL-H5133) at 5 µg/mL (100 µL/well) can bind Human ACVR2A, Fc Tag (Cat. No. ACA-H5269) with a linear range of 0.01-0.313 µg/mL (Routinely 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]



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