

## Recombinant Mouse Nodal Protein, His-tagged

**Cat. No.** Nodal-1833M    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Mouse Nodal Protein (His245-Leu354) with N-His tag was expressed in E. coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ProteinLength</b>    | His245-Leu354                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Description</b>      | <p>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. Homozygous knockout mice for this gene exhibit early embryonic lethality, while expression of a hypomorphic allele results in defects in anteroposterior and left-right patterning.</p> |
| <b>Form</b>             | Freeze-dried powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Molecular Mass</b>   | Predicted Molecular Mass: 12.9 kDa<br>Accurate Molecular Mass: 17 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purity</b>           | > 97%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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|                       |                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applications</b>   | Positive Control; Immunogen; SDS-PAGE; WB.                                                                                                                                                                                                                                                                                                   |
| <b>Stability</b>      | The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition. |
| <b>Storage</b>        | Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.                                                                                                                                                                                                                 |
| <b>Storage Buffer</b> | PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.                                                                                                                                                                                                                                                                      |
| <b>Reconstitution</b> | Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.                                                                                                                                                                                                                                            |

## GENE INFORMATION

|                        |                                                                                  |
|------------------------|----------------------------------------------------------------------------------|
| <b>Gene Name</b>       | Nodal nodal [ Mus musculus (house mouse) ]                                       |
| <b>Official Symbol</b> | Nodal                                                                            |
| <b>Synonyms</b>        | NODAL; nodal; transgenic lethal 413.d; early embryo mesoderm formation; Tg.413d; |
| <b>Gene ID</b>         | 18119                                                                            |
| <b>mRNA Refseq</b>     | NM_013611                                                                        |
| <b>Protein Refseq</b>  | NP_038639                                                                        |
| <b>UniProt ID</b>      | P43021                                                                           |

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