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Rabbit Anti-Nodal antibody

SL12243R

Product Name:	Nodal
Chinese Name:	胚胎发育相关蛋白Nodal抗体
Alias:	MGC138230; Nodal; nodal homolog (mouse); Nodal homolog; NODAL_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	13kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from Human Nodal:288-347/347
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The transforming growth factor Beta (TGF Beta) superfamily is composed of numerous growth and differentiation factors, including TGF Beta 1-3, Mullerian inhibiting substance (MIS), growth/differentiation factor (GDF) 1-9, bone morphogenic protein (BMP) 2-8, glial cell line-derived neurotrophic factor (GDNF), Inhibin Alpha, Beta-A, Beta-B and Beta-C, Lefty and Nodal. Members of the TGF Beta superfamily are involved in embryonic development and adult tissue homeostasis. Ectodermal cells through the primitive streak delaminate and differentiate into mesoderm during

gastrulation. Nodal expression is detectable in the primitive streak at the time of mesoderm formation, indicating a potential role for Nodal in mesoderm formation. Nodal has also been shown to be involved in the direction of heart looping and embryonic turning.

Function:
Essential for mesoderm formation and axial patterning during embryonic development.

Subunit:
Homodimer; disulfide-linked (By similarity).

Subcellular Location:
Secreted.

DISEASE:
Defects in NODAL are the cause of visceral heterotaxy autosomal type 5 (HTX5) [MIM:270100]. A form of visceral heterotaxy, a complex disorder due to disruption of the normal left-right asymmetry of the thoracoabdominal organs. It results in an abnormal arrangement of visceral organs, and a wide variety of congenital defects. Clinical features of visceral heterotaxy autosomal type 5 include situs inversus viscerum or situs ambiguus, congenital heart defect, transposition of the great vessels ventricular septal defect, atrial septal defect, truncuscommunis, and dextrocardia.

Similarity:
Belongs to the TGF-beta family.

SWISS:
Q96S42

Gene ID:
4838

Database links:

Entrez Gene: 4838Human

Omim: 601265Human

SwissProt: Q96S42Human

Unigene: 370414Human

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.