

Lefty/TGF β 4 Rabbit pAb

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Catalog # AP54432

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O75610
Predicted	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40880
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TGF beta 4
Epitope Specificity	51-150/366
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	During vertebrate embryogenesis, a left right axis is established. Secreted growth factors of the TGF beta family, including gene products derived from nodal, lefty 1 and lefty 2, play crucial roles in establishing left right asymmetries. TGF beta (Transforming growth factor beta) is a pleiotropic cytokine that regulates growth and differentiation of diverse types of cells. TGF beta actions are directed by ligand induced activation of TGF beta receptors. Complexes formed move into the nucleus, where they act as components of a transcriptional complex. Lefty, a novel member of the TGF beta superfamily, inhibits TGF beta signaling. Lefty acts to inhibit phosphorylation of Smad2 following activation of the TGF beta receptor. Lefty also inhibits events downstream from R Smad phosphorylation. Lefty provides a repressed state of TGF beta responsive genes. The Lefty family is comprised of Lefty 1 and Lefty 2 in mouse, and Lefty A and Lefty B in humans. Members of the TGF beta superfamily require processing for their activation. Cleavage is therefore an essential step for Lefty activation. Lefty is synthesized as a large inactive precursor (41 Kda) that must be endoproteolytically processed to release the bioactive polypeptide (28 kDa and 34 kDa forms). The 28kDa form induces MAPK activity.

Additional Information

Gene ID	10637
Other Names	Left-right determination factor 1, Left-right determination factor B, Protein lefty-1, Protein lefty-B, LEFTY1, LEFTB, LEFTYB

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:500 0-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	LEFTY1
Synonyms	LEFTB, LEFTYB
Function	Required for left-right axis determination as a regulator of LEFTY2 and NODAL.
Cellular Location	Secreted.

Background

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