Datasheet for ABIN103459

anti-Left-Right Determination Factor (LEFTY-A) antibody

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Overview

Quantity:	100 µg
Target:	Left-Right Determination Factor (LEFTY-A)
Reactivity:	Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	Un-conjugated
Application:	Western Blotting (WB), ELISA, Immunoprecipitation (IP), Immunohistochemistry (IHC), Radioimmunoassay (RIA)

Product Details

Immunogen:	A BALB/c mouse was immunized with a recombinant form of 6X HIS tagged human LEFTY. Immunogentype:Recombinant
Clone:	7C5G1H6H10
Isotype:	IgG
Characteristics:	Concentration Definition: by UV absorbance at 280 nm
Sterility:	Sterile filtered

Target Details

Target:	Left-Right Determination Factor (LEFTY-A)
Alternative Name:	LEFTY A (LEFTY-A Products)

Target Details

Background:	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 (42 Kda) that must be endoproteolytically processed to release the bioactive polypeptide (28 kDa and 34 kDa forms). The 28kDa form induces MAPK activity. Synonyms: Left-right determination factor 2 antibody, Protein lefty-2 antibody, Left-right determination factor A antibody, Protein lefty-A antibody, Transforming growth factor beta-4 antibody, TGF-beta-4 antibody,Endometrial bleeding-associated factor antibody
Gene ID:	320202
UniProt:	P57785, O00292

Application Details

Application Notes:	This antibody is suitable for ELISA and western blotting. The antibody may be used for other applications, such as RIA, immunohistochemistry or immunoprecipitation, but specific reaction conditions have not been developed.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	Sodium azide

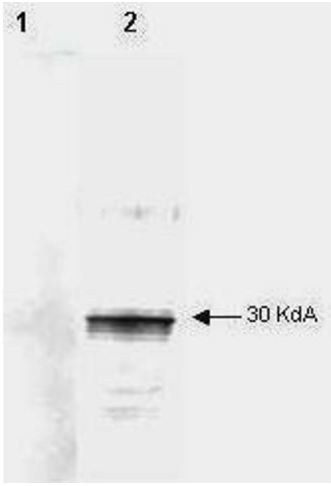
Handling

Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Publications

Product cited in:	Dolezalová, Vojt?sek, Kovarík: "Epitope analysis of the human p53 tumour suppressor protein." in: **Folia biologica**, Vol. 43, Issue 1, pp. 49-51, (1997) (PubMed). Bártková, Bártek, Lukás, Vojt?sek, Stasková, Rejthar, Kovarík, Midgley, Lane: "p53 protein alterations in human testicular cancer including pre-invasive intratubular germ-cell neoplasia." in: **International journal of cancer. Journal international du cancer**, Vol. 49, Issue 2, pp. 196-202, (1991) (PubMed).

Images



Western Blotting

Image 1. Mab anti-Human LEFTY antibody (clone 7C5G1H6H10) is shown to detect by western blot partially purified recombinant 6X His tagged human LEFTY. Detection occurs after 1.0 ?g of protein is loaded in each lane. The blot was incubated with a 1:2,000 dilution of Mab anti-Human LEFTY at room temperature for 30 min followed by detection using800 labeled Goat-a-Mouse IgG [H&L] diluted 1:1,000. Lane 1 contains an unrelated 6X His tagged protein and shows that the antibody does not recognize the epitope tag. Lane 2 contains partially purified recombinant human LEFTY. The antibody may be used to detect endogenous human LEFTY.800 fluorescence image was captured using the Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.