
Product Name: KD-Validated LEFTY1 + LEFTY2 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA01756

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; ICC 1:100-1:1,000
Molecular Weight	Predicted, 41 kDa, observed, 34 kDa

Antigen Information

Gene Name	LEFTY1/LEFTY2 LEFTY1; Left-Right Determination Factor 1; LEFTYB; LEFTB; Left-Right Determination Factor B; Protein Lefty-1; Protein Lefty-B; Left-Right Determination, Factor B; LEFTY2; Left-Right Determination Factor 2; LEFTYA; LEFTA; TGFB4; EBAF; Endometrial Bleeding-Associated
Alternative Names	Factor; Left-Right Determination Factor A; Transforming Growth Factor Beta-4; Protein Lefty-2; Protein Lefty-A; TGF-Beta-4; Endometrial Bleeding Associated Factor (Left-Right Determination, Factor A; Transforming Growth Factor Beta Superfamily); Transforming Growth Factor, Beta-4 (Endometrial Bleeding-Associated Factor; LEFTY A)
Gene ID	10637, 7044
SwissProt ID	O75610, O00292
Immunogen	A synthesized peptide derived from human LEFTY1 + LEFTY2

Background

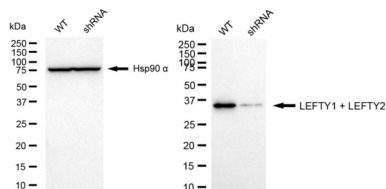
LEFTY1: This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate the mature protein, which plays a role in left-right asymmetry determination of organ systems during development. This gene is closely linked to both a related family member and a related pseudogene. [provided by RefSeq, Aug 2016]

LEFTY2: 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 plays a role in left-right asymmetry determination of organ systems during development. The protein may also play a role in endometrial bleeding. Mutations in this gene have been associated with left-right axis malformations, particularly in the heart and lungs. Some types of infertility have been associated with dysregulated expression of this gene in the endometrium. This gene is closely linked to both a related family member and a related pseudogene. This gene encodes multiple isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Aug 2016]

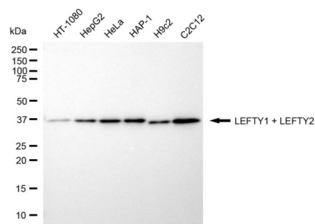
Research Area

Signal Transduction, Stem Cells, Cancer

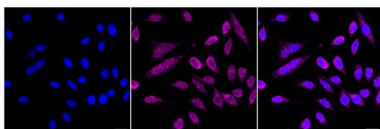
Image Data



Western blotting analysis using LEFTY1 + LEFTY2 antibody (KVA01756). LEFTY1 + LEFTY2 expression in wild type (WT) and LEFTY1 + LEFTY2 shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with LEFTY1 + LEFTY2 antibody (KVA01756, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using LEFTY1 + LEFTY2 antibody (KVA01756). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with LEFTY1 + LEFTY2 antibody (KVA01756, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with LEFTY1 + LEFTY2 antibody (KVA01756, 1:1,000). Nuclei were stained blue with DAPI; LEFTY1 + LEFTY2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 µm.