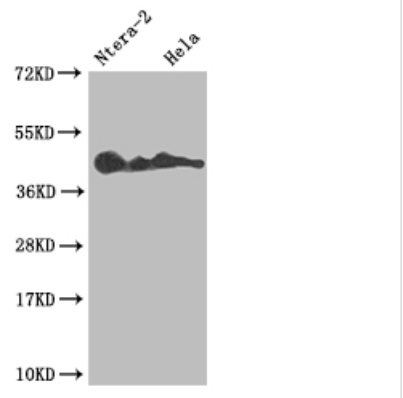
LEFTY2 Recombinant Monoclonal Antibody

Product Code	CSB-RA171603A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O00292
Immunogen	A synthesized peptide derived from human LEFTY2
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:2000
Relevance	Required for left-right (L-R) asymmetry determination of organ systems in mammals. May play a role in endometrial bleeding.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	0
Gene Names	LEFTY2
Clone No.	10G2

Image



Western Blot
Positive WB detected in: Ntera-2 whole cell lysate, Hela whole cell lysate
All lanes: LEFTY2 antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 41, 38 kDa
Observed band size: 36-45 kDa

Description

The process of creating the LEFTY2 recombinant monoclonal antibody involves multiple stages. First, the LEFTY2 monoclonal antibody is harvested and its gene sequence is determined. Next, a vector carrying the LEFTY2 monoclonal antibody gene is constructed and transfected into a host cell line for culture.

During the production of the LEFTY2 monoclonal antibody, a synthesized peptide from human LEFTY2 is used as the immunogen. Once produced, the LEFTY2 recombinant monoclonal antibody is purified using affinity chromatography. Finally, the specificity of the LEFTY2 recombinant monoclonal antibody is evaluated through ELISA and WB applications.

LEFTY2 protein is a secreted protein that plays a key role in embryonic development, specifically in the determination of left-right asymmetry. It is a member of the transforming growth factor-beta (TGF-β) superfamily and is expressed in the left lateral plate mesoderm during early development. LEFTY2 is involved in the regulation of nodal signaling, which is essential for the establishment of left-right asymmetry. It acts as an antagonist to nodal signaling by binding to nodal proteins and inhibiting their activity, thereby promoting left-sidedness. Additionally, LEFTY2 has been shown to have anti-tumor effects in certain cancers.