Mouse Lefty-2 Antibody

Monoclonal Rat IgG_{2B} Clone # 836101

Catalog Number: MAB7648

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Lefty-2 in ELISAs. In direct ELISAs, no cross-reactivity with recombinant human Lefty-A or recombinant mouse Lefty-1 is observed.
Source	Monoclonal Rat IgG_{2B} Clone # 836101
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Lefty-2 Phe78-Leu368 Accession # P57785
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

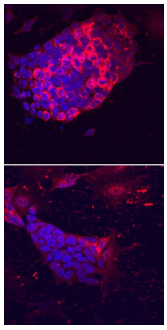
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



Lefty-2 in D3 Mouse Stem Cell Line. Lefty-2 was detected in immersion fixed D3 mouse embryonic stem cell line cultured with (upper panel) or without (lower panel) Recombinant Human/Mouse/Rat Activin A (Catalog # 338-AC) using Rat Anti-Mouse Lefty-2 Monoclonal Antibody (Catalog # MAB7648) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to the perinuclear region. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Lefty-2 (Left-right determination factor 2; also Lefty-B [in human]) is a atypical member of the TGF-β family of proteins. It is expressed during early embryogenesis in both the primitive streak and left-side lateral plate mesoderm. In the adult, Lefty-2 appears in oviduct epithelium. Lefty-2 acts in a manner reminiscent of that for Chordin and Noggin, and it is assumed that Lefty-2 is an antagonist of BMP activity. Notably, Lefty-2 and Nodal are likely under the control of Lefty-1, and thus all three molecules would appear to contribute to the creation of a left side-type body plan. Mouse Lefty-2 is synthesized as a 368 amino acid (aa) preproprecursor. It contains a 21 aa signal sequence, plus a 347 aa, 41-42 kDa bioactive proprecursor that may undergo proteolytic processing at one of two downstream cleavage sites. If cleavage occurs after Arg77, the resulting 33-34 kDa mature form (aa 78-368) is biologically inactive; if cleavage occurs after Arg135, the resulting 27-28 kDa mature form (aa 136-368) is biologically active. Lefty-2 is not a covalent homodimer and has been suggested to act as a monomer. Over aa 78-368, mouse Lefty-2 shares 94%, 83% and 95% aa sequence identity with rat Lefty-2, human Lefty-B and mouse Lefty-1, respectively.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956