

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
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Immunocytochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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.

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