

Rat anti-Mouse Nectin-3, clone 103-A1 (Monoclonal)

Clone no. 103-A1

MONOSAN

Product name	Rat anti-Mouse Nectin-3, clone 103-A1 (Monoclonal)
Host	Rat
Applications	IHC-fr,FC,FUNC,ELISA,IF,IP
Species reactivity	mouse
Conjugate	-
Immunogen	Unknown or proprietary to MONOSAN and/or its suppliers
Isotype	IgG2a
Clonality	Monoclonal
Clone number	103-A1
Size	1 ml
Concentration	100 ug/ ml
Format	-
Storage buffer	PBS with 0.1% BSA and 0.02% sodium azide
Storage until expiry date	2-8°C

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES

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Additional info

The monoclonal antibody 103-A1 recognizes mouse nectin-3. Nectin-3 is a 83 kDa type I transmembrane glycoprotein. Nectin, originally isolated as poliovirus receptor-related protein (PRR), is a cell-cell adhesion molecule of the immunoglobulin supergene family. Nectins are calcium-independent immunoglobulin-like cell-cell adhesion molecules consisting of four members, nectin 1-4. Nectins homophilically and heterophilically trans-interact to form a variety of cell-cell junctions, including cadherin-based adherens junctions in epithelial cells and fibroblasts in culture, synaptic junctions in neurons, and Sertoli cell-spermatid junctions in testis, in cooperation with, or independently of, cadherins. Both nectin-2 and nectin-3 are ubiquitously expressed, whereas nectin-1 is abundantly expressed in brain. Nectin-2 and -3 are expressed in cells where cadherin is not expressed, such as blood cells and spermatids. All members of the nectin family have two or three splice variants. For nectin-3, three isoforms exist: nectin-3 α , -3 β and -3 γ of which nectin-3 α is the largest. Nectin-3, also known as PRR3, is a transmembrane protein that is predominantly expressed in testis and placental tissues as well in many cell lines. Nectin interacts in vivo with both long and short isoforms of afadin, an actin binding protein, at cadherin-based cell-cell adherence junctions in various tissues and cell lines. Furthermore, the ectodomains of nectin-3 and CD155 (Poliovirus Receptor) have shown strong affinity to each other. Injection of antibody 103-A1 into lumen of seminiferous tubules leads to disruption of the actin filaments in Sertoli cells at the Sertoli-maturing spermatid ectoplasmic specialization and exfoliation of maturing spermatids from the seminiferous epithelium.

References

1. Satoh-Horikawa; K et al. J Biol Chem 2000; 275: 10291
2. Mizoguchi, A et al J Cell Biol, 2002, 156: 555
3. Mueller; S et al. Biol Reprod 2003; 69: 1330
4. Guttman J et al. Biol of Reprod 2004; 71: 548
5. Inagaki M et al. Development 2005; 132: 1525

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