



## MONOCLONAL ANTIBODY

For research use only, Not for diagnostic use.

Catalog No. PRPG-NDG-M01

**Anti Laminin-nidogen complexe (331G3)****BACKGROUND**

Nidogen-1 (originally also named entactin) and its homologue nidogen-2 are ubiquitous and highly conserved components of basement membranes (BMs), though nidogen-2 shows more restricted expression patterns throughout development and some tissue specificity in the adult [1-5]. In BMs nidogens play a fundamental role in linking the collagen type IV-laminins networks and in bridging these networks with oligomers of perlecan, matrilins and fibulins. Nidogen-1 is encoded by the NID1 gene and is translated as a 158 kDa globular protein containing three distinct globules with diverse ligand binding specificity. Gene deletion of either nidogen does not disrupt developmental BM assembly, whereas ablation of both NID1 and NID2 murine genes leads to BM abnormalities and prenatal death [6-8]. Alterations in nidogen-1 expression have been associated with neoplastic transformation (e.g. hepatocarcinoma, melanoma, bladder carcinoma, renal carcinoma, gastrointestinal cancer), skin, renal, retinal, muscle and connective tissue degenerative diseases.

<b>Product type</b>	Primary antibodies
<b>Immunogen</b>	Purified laminin-collagen complexes from bovine kidney
<b>Host Species</b>	Mouse
<b>Fusion Partner</b>	-
<b>Clone Designation</b>	331G3
<b>Isotype</b>	IgM
<b>Host</b>	-
<b>Source</b>	Hybridoma cell culture
<b>Purification</b>	-
<b>Form</b>	Liquid
<b>Formulation Buffer</b>	Supernatant supplemented with 0.05% NaN <sub>3</sub>
<b>Concentration</b>	ND
<b>Volume</b>	2 mL
<b>Label</b>	Unlabeled
<b>Specificity</b>	Nidogen-1 (cross-reactivity with nidogen-2 not verified)
<b>Cross species reactivity</b>	Human, Other species have not been tested.
<b>Storage Conditions</b>	Store at 4°C for short-term storage and -20°C for prolonged storage Aliquot to avoid cycles of freeze / thaw.

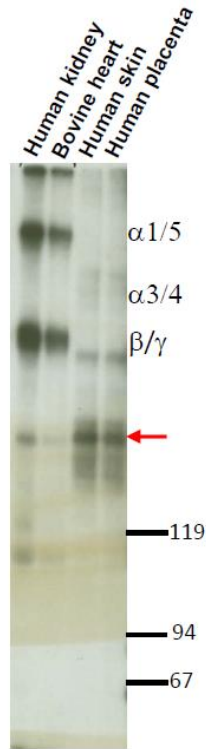
<b>Application notes</b>	<ul style="list-style-type: none"><li>• <b>Immunoprecipitation</b> : 1/5 - 1/10 (immunoprecipitates laminin-nidogen complexes)</li></ul>
Recommended dilutions	<ul style="list-style-type: none"><li>• <b>Immunohistochemistry</b> : 1/25 to 1/75 (on frozen tissue sections)</li><li>• <b>ELISA</b> : 1/100 - 1/250</li></ul>

\*220 kDa SDS-PAGE under reducing conditions;>600 kDa under non-reducing conditions

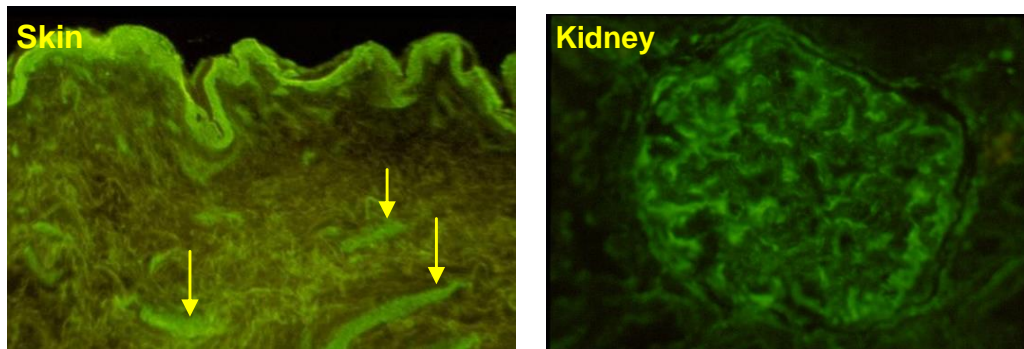
Optimal dilutions/concentrations should be determined by the end user.

<b>References</b>	<ol style="list-style-type: none"><li>1) Carlin B, et al., <i>J Biol Chem.</i> 1981 May 25;256(10):5209-14.. PMID: <a href="#">6262321</a></li><li>2) Timpl R, et al., <i>Eur J Biochem.</i> 1983 Dec 15;137(3):455-65.. PMID: <a href="#">6420150</a></li><li>3) Kohfeldt E, et al., <i>J Mol Biol.</i> 1998 Sep 11;282(1):99-109. PMID: <a href="#">9733643</a></li><li>4) Ho MS, et al., <i>Microsc Res Tech.</i> 2008 May;71(5):387-95.. PMID: <a href="#">18219668</a></li><li>5) Breitzkreutz D, et al., <i>Biomed Res Int.</i> 2013;2013:179784. PMID: <a href="#">23586018</a></li><li>6) Murshed M, et al., <i>Mol Cell Biol.</i> 2000 Sep;20(18):7007-12. PMID: <a href="#">10958695</a></li><li>7) Miosge N, et al., <i>Matrix Biol.</i> 2002 Nov;21(7):611-21. PMID: <a href="#">12475645</a></li><li>8) Bader BL, et al., <i>Mol Cell Biol.</i> 2005 Aug;25(15):6846-56. PMID: <a href="#">16024816</a></li></ol>
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## ANTIBODY CHARACTERIZATION



**Fig.1 Immunoprecipitation** of biotinylated laminin-nidogen complexes resolved by SDS-PAGE on 5% gels under reducing conditions and visualized by chemiluminescence; red arrow points to the nidogen band, whereas upper bands correspond to  $\alpha$ ,  $\beta$  and  $\gamma$  laminin chains.



**Fig.2 Immunofluorescent localization** of nidogen in basement membranes of human skin and kidney Bowman's capsule in fresh-frozen sections (*arrows point microvascular vessels*).

**< Staining Pattern >**

\* mAb 331G3 stains basement membranes of all major organs/tissues of the human body.

## RELATED PRODUCT

Product Name	Clone	Maker	Cat#
Anti CS [Chondroitin Sulfate] Monoclonal Antibody	2B6	CAC	PRPG-BC-M02
Anti CS [Chondroitin Sulfate] Monoclonal Antibody	1B5	CAC	PRPG-BC-M03
Anti CS [Chondroitin Sulfate] Monoclonal Antibody	3B3	CAC	PRPG-BC-M04
Anti Chondroitin Sulfate A Monoclonal Antibody	2H6	CAC	NU-07-001
Anti Aggrecan Monoclonal Antibody	6F4	CAC	PRPG-AG-M01
Anti Aggrecan Monoclonal Antibody	5D3	CAC	PRPG-AG-M02
Anti Aggrecan Monoclonal Antibody	5G2	CAC	PRPG-AG-M03
Anti Aggrecan Monoclonal Antibody	7B7	CAC	PRPG-AG-M04
Anti Versican/CSPG2 Monoclonal Antibody	5C12	CAC	PRPG-VS-M01
Anti Versican/CSPG2 Monoclonal Antibody	4C5	CAC	PRPG-VS-M02
Anti Versican/CSPG2 Monoclonal Antibody	2B3	CAC	PRPG-VS-M03
Anti Versican/CSPG2 Monoclonal Antibody	6B10	CAC	PRPG-VS-M04
Anti Neurocan Monoclonal Antibody	1G2	CAC	NU-07-002
Anti Neuroglycan C Monoclonal Antibody	C1	CAC	NU-07-003
Anti Neurocan peptides Polyclonal Antibody	-	CAC	NU-07-005
Anti N-syndecan Polyclonal Antibody	-	CAC	NU-07-004
Anti BPAG1(BP230) Monoclonal Antibody	279	CAC	NU-01-BP1
Anti NG2 / CSPG4 Monoclonal Antibody	2164H5	CAC	PRPG-NG-M01
Anti COMP Monoclonal Antibody	484D1	CAC	PRPG-CP-M01
Anti COMP Monoclonal Antibody	490D11	CAC	PRPG-CP-M02
Anti COMP Fragment Monoclonal Antibody	2117B2	CAC	PRPG-CPF-M01
Anti Keratan sulfate Monoclonal Antibody	373E1	CAC	PRPG-KS-M01
Anti KS [Keratan Sulfate] Monoclonal Antibody	5DA	CAC	PRPG-BC-M01
Anti Decorin Monoclonal Antibody	889C7	CAC	PRPG-DC-M01
Anti Fibromodulin Monoclonal Antibody	636B12	CAC	PRPG-FBM-M01
Anti Biglycan Monoclonal Antibody	905A7	CAC	PRPG-BG-M01
Anti XTP1 Monoclonal Antibody	2191H1	CAC	PRPG-XTP-M01
Anti SDP35 Monoclonal Antibody	2200D12	CAC	PRPG-SDP-M01
Anti Laminin $\alpha$ 4 Monoclonal Antibody	652C4	CAC	PRPG-LA4-M01
Anti Laminin ALPHA3 Monoclonal Antibody	BM515	CAC	NU-01-LA3
Anti Laminin-nidogen complexe Monoclonal Antibody	331G3	CAC	PRPG-NDG-M01
Anti Collagen 7 Monoclonal Antibody	BML39	CAC	NU-01-CO7
Anti Collagen 12 Monoclonal Antibody	378D5	CAC	PRPG-CO12-M01

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**COSMO BIO Co., LTD.**

【JAPAN】  
 TOYO EKIMAE BLDG. 2-20, TOYO 2-CHOME,  
 KOTO-KU. TOKYO 135-0016, JAPAN  
 Phone: +81-3-5632-9610  
 FAX: +81-3-5632-9619  
 URL: <https://www.cosmobio.co.jp/>



**COSMO BIO USA**

【Outside Japan】  
 2792 Loker Ave West, Suite 101  
 Carlsbad, CA 92010, USA  
 email: [info@cosmobioussa.com](mailto:info@cosmobioussa.com)  
 Phone/FAX: (+1) 760-431-4600  
 URL: [www.cosmobioussa.com](http://www.cosmobioussa.com)