

# Product Datasheet

## PGLYRP3/PGRPIA Antibody (187C434) - BSA Free NB100-56729

Unit Size: 0.2 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NB100-56729****PGLYRP3/PGRPIA Antibody (187C434) - BSA Free**

<b>Product Information</b>	
<b>Unit Size</b>	0.2 ml
<b>Concentration</b>	This product is unpurified. The exact concentration of antibody is not quantifiable.
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	187C434
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgM
<b>Purity</b>	Unpurified
<b>Buffer</b>	Ascites

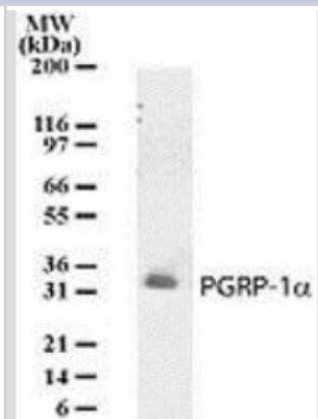
<b>Product Description</b>	
<b>Description</b>	Novus Biologicals Mouse PGLYRP3/PGRPIA Antibody (187C434) - BSA Free (NB100-56729) is a monoclonal antibody validated for use in WB, Flow and ICC/IF. Anti-PGLYRP3/PGRPIA Antibody: Cited in 6 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Mouse
<b>Gene ID</b>	114771
<b>Gene Symbol</b>	PGLYRP3
<b>Species</b>	Human
<b>Immunogen</b>	This antibody was developed against KLH-conjugated synthetic peptide corresponding to amino acids 178-193 of human PGRP-1a.

<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Flow Cytometry, Flow (Cell Surface), Flow (Intracellular), Immunocytochemistry/ Immunofluorescence
<b>Recommended Dilutions</b>	Western Blot, Flow Cytometry 1:10-1:1000, Immunocytochemistry/ Immunofluorescence 1:10-1:2000. Use reported in scientific literature (Uehara et al (2005)), Flow (Cell Surface) reported in scientific literature (PMID 15839897), Flow (Intracellular) reported in scientific literature (PMID 16849490)

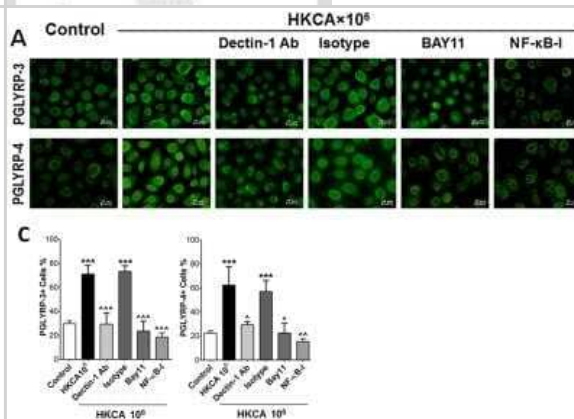


## Images

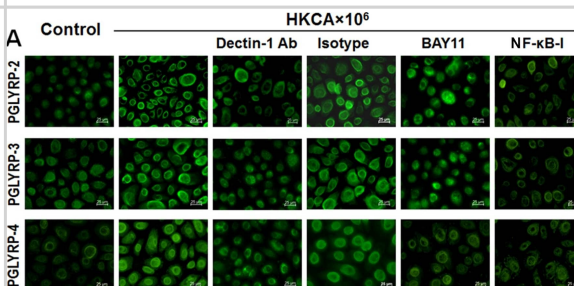
Western Blot: PGLYRP3/PGRPIA Antibody (187C434) [NB100-56729] - Analysis in cell lysates from human brain using this antibody at a dilution of 1:500.



Immunocytochemistry/Immunofluorescence: PGLYRP3/PGRPIA Antibody (187C434) [NB100-56729] - A. HCECs were exposed to HKCA (106 cells/ml) with prior incubation in the absence or presence of isotype IgG (10ug/ml), dectin-1 neutralizing Ab (10ug/ml), BAY11-7082 (10uM) or NF-κB activation inhibitor quinazoline (NF-κB-I, 10uM) for 1 h. HCECs were treated with 106 cells/ml HKCA for 48 hours in 8-chamber slides and examined by immunofluorescent staining for PGLYRPs 3 and 4. (NB100-56721) C. The percentages of positive cells of PGLYRPs 3 and 4 staining in HCECs in A was quantified. Results shown are the mean  $\pm$  SD of four independent experiments; \*\*\*  $p < 0.001$ , as compared with normal control;  $\wedge p < 0.005$ ,  $\wedge\wedge p < 0.001$ , as compared with HCECs exposed to HKCA. Magnification: 400x (bar = 25um). Image collected and cropped by CiteAb from the following publication (<https://dx.plos.org/10.1371/journal.pone.0128039>) licensed under a CC-BY license.



NF-kappaB p65 activation was induced by HKCA and inhibited by dectin-1 neutralizing antibody and NF-kappaB activation inhibitor quinazoline (NF-kappaB-I) in HCECs. A. HCECs were exposed to HKCA (106 cells/ml) with prior incubation in the absence or presence of isotype IgG (10ug/ml), dectin-1 neutralizing Ab (10ug/ml), BAY11-7082 (10uM) or NF-kappaB activation inhibitor quinazoline (NF-kappaB-I, 10uM) for 1 h. HCECs were treated with 106 cells/ml HKCA for 48 hours in 8-chamber slides and examined by immunofluorescent staining for PGLYRPs 2-4. Image collected and cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/26039076>), licensed under a CC-BY licence.



## Publications

Hua X, Yuan X, Li Z et al. A Novel Innate Response of Human Corneal Epithelium to Heat-killed *Candida albicans* by Producing Peptidoglycan Recognition Proteins PLoS ONE. 2015-06-04 [PMID: 26039076] (ICC/IF, Human)

### Details:

PGLYRP4/PGRP-I beta antibody (clone 186C426; Imgenex IMG-414) was used for ICC-IF staining on human corneal epithelial cells /HCECs that were incubated in the absence or presence of isotype IgG (10ug/ml), dectin-1 neutralizing Ab (10ug/ml), BAY11-7082 (10uM) or NF-kB activation inhibitor quinazoline (NF-kB-I, 10uM) for 1 h followed by 48 hours incubation of HKCA/heat-killed *Candida albicans* ( $10^6$  cells/ml). The immunoassay implicated 10 minutes RT fixation with 2% PFA, 10 minutes RT permeabilization with PBS-0.2% Triton X-100, detection of primary using Alexa-Fluor 488 conjugated secondary antibody (Fig 4A).

Uehara A, Sugawara Y, Kurata S et al. Chemically synthesized pathogen-associated molecular patterns increase the expression of peptidoglycan recognition proteins via toll-like receptors, NOD1 and NOD2 in human oral epithelial cells. *Cell Microbiol.* 2005-05-01 [PMID: 15839897] (ICC/IF, Flow-CS)

### Details:

Flow (cell surface): PGRP-1alpha (IMG-391), PGRP-1beta (IMG-414), and PGRP-S (IMG-393) were used in human oral epithelial (HSC-2) cell lines, Fig 3. IF/ICC: HSC-2 cells stimulated with or without lipid A, muramyl dipeptide (MDP), gamma-D-glutamyl-meso-DAP (iE-DAP), or IFN gamma then stained with PGRP-1beta (IMG-414), Fig 4.

Uehara A, Fujimoto Y, Fukase K, Takada H. Various human epithelial cells express functional Toll-like receptors, NOD1 and NOD2 to produce anti-microbial peptides, but not proinflammatory cytokines. *Mol Immunol.* 2007-05-01 [PMID: 17403538] (Flow-CS, Human)

### Details:

The following products were used in flow (cell surface): PGRP-1alpha (IMG-391), PGRP-1beta (IMG-414), PGRP-S (IMG-393). Human oral epithelial (HSC-2, HSC-3, SAS, & HO-1-u-1), human pharyngeal epithelial (HEp-2), human esophageal epithelial (TE-1), human b

Ma P, Wang Z, Pflugfelder SC, Li DQ. Toll-like receptors mediate induction of peptidoglycan recognition proteins in human corneal epithelial cells. *Exp Eye Res.* 2010-01-01 [PMID: 19799901] (ICC/IF, Human)

### Details:

PGRP-1alpha (IMG-391) & PGRP-1beta (IMG-414). IF/ICC: Human corneoscleral tissue & primary cultured human corneal epithelial cells, Fig 1.

Uehara A, Takada H. Synergism between TLRs and NOD1/2 in oral epithelial cells. *J Dent Res.* 2008-07-01 [PMID: 18573991] (Flow-CS)

### Details:

flow (cell surface): PGRP-1alpha (IMG-391), PGRP-1beta (IMG-414), PGRP-S (IMG-393). Oral epithelial HSC-2 cell line stimulated with Fk156 or muramyl dipeptide (MDP) plus FSL-1 and lipid A, Fig 1.

Uehara A, Fujimoto Y, Kawasaki A et al. Meso-diaminopimelic acid and meso-lanthionine, amino acids specific to bacterial peptidoglycans, activate human epithelial cells through NOD1. *J Immunol.* 2006-08-01 [PMID: 16849490] (Flow Cytometry Control)

### Details:

flow (Intracellular): PGRP-1alpha (IMG-391) & PGRP-1beta (IMG-414); Human oral epithelial (HSC-2) cell line, Fig 2.



### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NB100-56729**

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NB820-59177	Human Brain Whole Tissue Lysate (Adult Whole Normal)
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97007	Mouse IgM Isotype Control

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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