10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# REG3G Antibody (Center)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP5606c**

## Specification

### REG3G Antibody (Center) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P, FC,E** |
| Primary Accession | Q6UW15 |
| Other Accession | NP_001008388.1 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Antigen Region | **89-116** |

### REG3G Antibody (Center) - Additional Information

**Gene ID** 130120

**Other Names**
Regenerating islet-derived protein 3-gamma, REG-3-gamma, Pancreatitis-associated protein 1B, PAP-1B, Pancreatitis-associated protein IB, PAP IB, Regenerating islet-derived protein III-gamma, REG III, Reg III-gamma, Regenerating islet-derived protein 3-gamma 165 kDa form, Regenerating islet-derived protein 3-gamma 15 kDa form, REG3G, PAP1B

**Target/Specificity**
This REG3G antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 89-116 amino acids of human REG3G.

**Dilution**
WB~~1:1000
IHC-P~~1:25
FC~~1:10~50

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
REG3G Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### REG3G Antibody (Center) - Protein Information

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**Name** REG3G (HGNC:29595)

**Synonyms** PAP1B

**Function** Bactericidal C-type lectin which acts exclusively against Gram-positive bacteria and mediates bacterial killing by binding to surface-exposed carbohydrate moieties of peptidoglycan. Restricts bacterial colonization of the intestinal epithelial surface and consequently limits activation of adaptive immune responses by the microbiota.

**Cellular Location**
Secreted {ECO:0000250|UniProtKB:P42854}. Cytoplasm {ECO:0000250|UniProtKB:P42854}

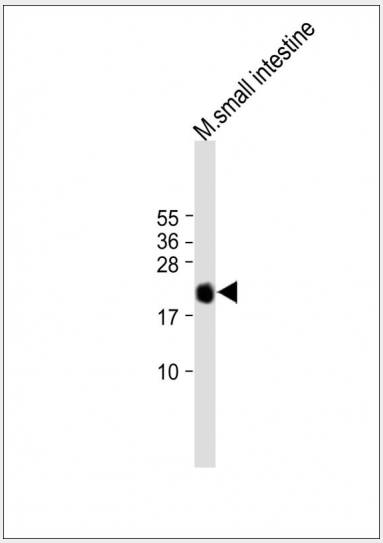
**Tissue Location**
Predominantly expressed in pancreas, where it may be restricted to exocrine pancreas. Moderate expression levels in testis and weak in heart, kidney and placenta

## REG3G Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## REG3G Antibody (Center) - Images




All lanes : Anti-REG3G Antibody (Center) at 1:1000 dilution Lane 1: mouse small intestine tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/15000 dilution. Observed band size : 20kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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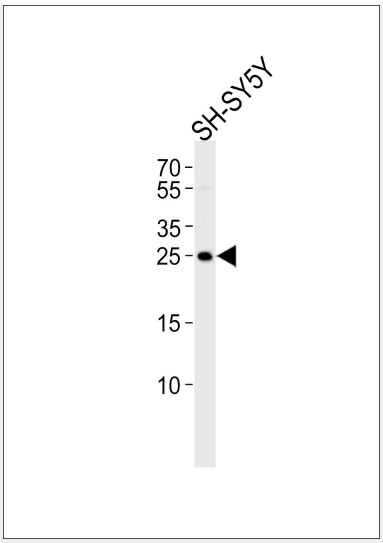
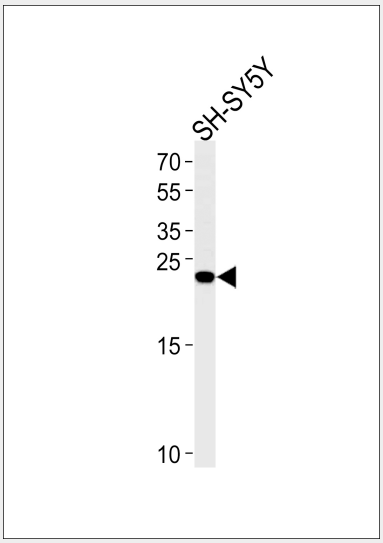



Western blot analysis of lysate from SH-SY5Y cell line, using REG3G Antibody (Center)(Cat. #AP5606c). AP5606c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.




REG3G Antibody (Center) (Cat.# AP5606c) western blot analysis in SH-SY5Y cell line lysates (35ug/lane).This demonstrates the REG3G antibody detected the REG3G protein (arrow).

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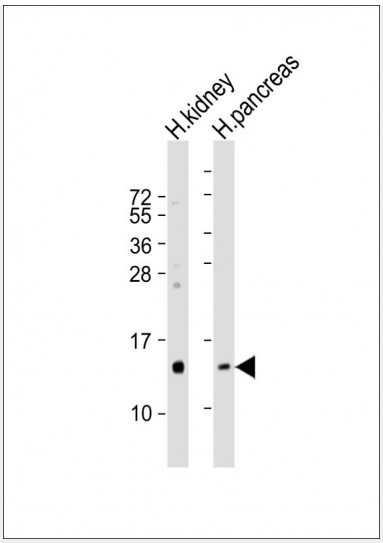
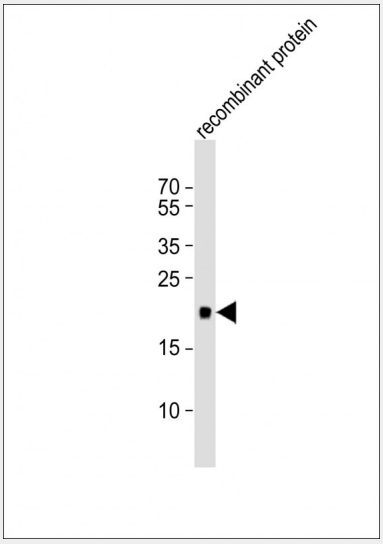
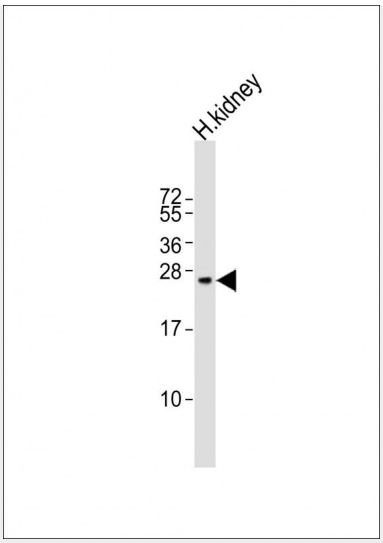


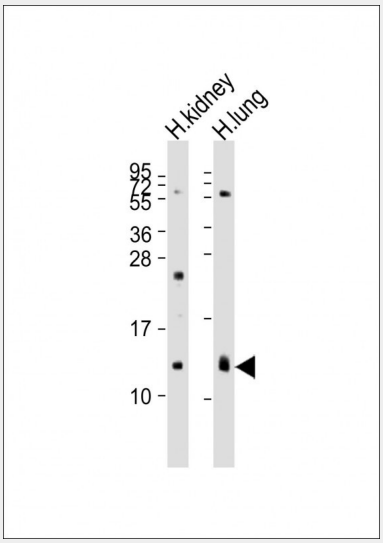

All lanes : Anti-REG3G Antibody (Center) at 1:100 dilution Lane 1: human kidney lysates Lane 2: human pancreas lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



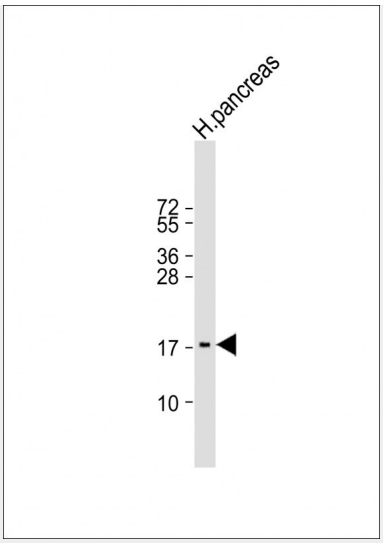

Anti-REG3G Antibody (Center)at 1:1000 dilution + recombinant protein lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



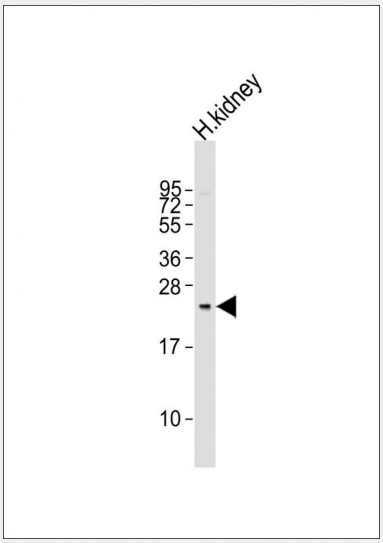

Anti-REG3G Antibody (Center)at 1:400 dilution + human kidney lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



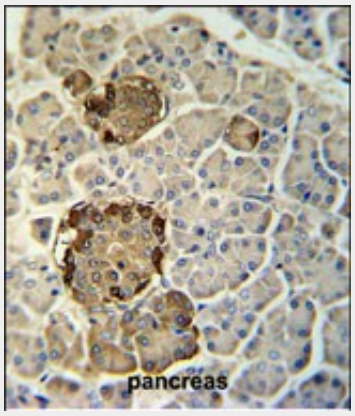

All lanes : Anti-REG3G Antibody (Center) at 1:2000 dilution Lane 1: human kidney lysates Lane 2: human lung lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.




Anti-REG3G Antibody (Center) at 1:2000 dilution + human pancreas lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

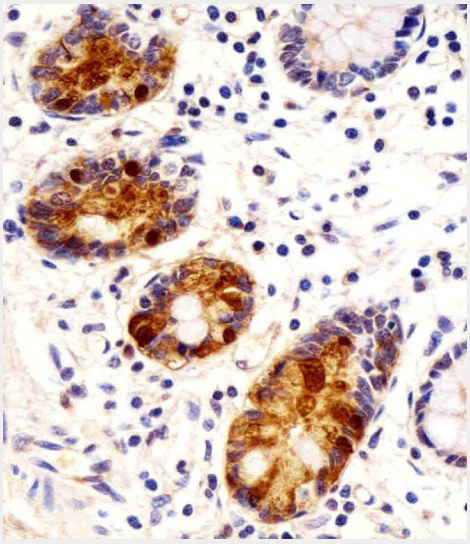



Anti-REG3G Antibody (Center)at 1:1000 dilution + human kidney lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

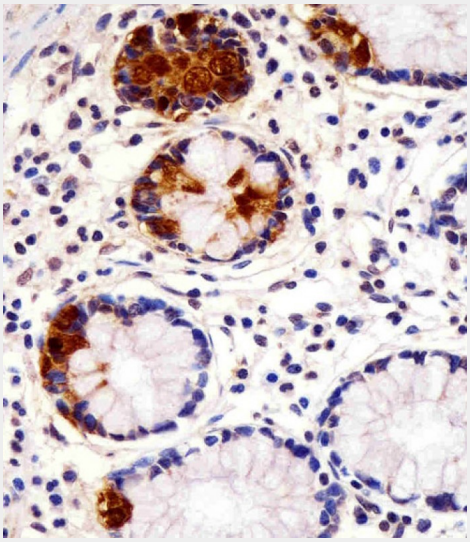



REG3G Antibody (Center) (Cat. #AP5606c) immunohistochemistry analysis in formalin fixed and

paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the REG3G Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



AP5606C staining REG3G in human small intestine sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



AP5606C staining REG3G in human small intestine sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

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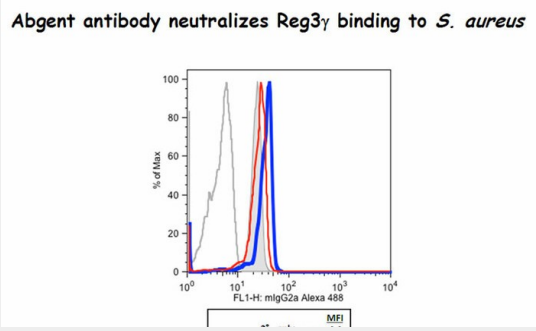


Reg3g binds to Staphylococcus aureus and the antibody did block some of this binding(Kindly offered by Dr. Choi).

**REG3G Antibody (Center) - Background**

REG3G might be a stress protein involved in the control of bacterial proliferation (By similarity).

**REG3G Antibody (Center) - References**

Taylor-Fishwick, D.A., et al. J. Histochem. Cytochem. 56(2):183-191(2008)
Hamblet, N.S., et al. Pancreas 36(1):1-9(2008)
Hillier, L.W., et al. Nature 434(7034):724-731(2005)
Laurine, E., et al. Biochim. Biophys. Acta 1727(3):177-187(2005)

**REG3G Antibody (Center) - Citations**

- The colonic macrophage transcription factor RBP-J orchestrates intestinal immunity against bacterial pathogens
- Commensal bacteria direct selective cargo sorting to promote symbiosis.
- Reg3g Promotes Pancreatic Carcinogenesis in a Murine Model of Chronic Pancreatitis.
- Autophagy in pancreatic acinar cells in caerulein-treated mice: immunolocalization of related proteins and their potential as markers of pancreatitis.
- Innate Stat3-mediated induction of the antimicrobial protein Reg3γ is required for host defense against MRSA pneumonia.