

For Research Use Only

# ZG16 Monoclonal antibody

Catalog Number: 67389-1-Ig **2 Publications**



## Basic Information

<b>Catalog Number:</b> 67389-1-Ig	<b>GenBank Accession Number:</b> BC029149	<b>Purification Method:</b> Protein A purification
<b>Concentration:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 653808	<b>CloneNo.:</b> 1A7B9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> O60844	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:250-1:1000 IF-P 1:200-1:800 IF-Fro 1:200-1:800
<b>Isotype:</b> IgG1	<b>Full Name:</b> zymogen granule protein 16 homolog (rat)	
<b>Immunogen Catalog Number:</b> AG11332	<b>Calculated MW:</b> 167 aa, 18 kDa	
	<b>Observed MW:</b> 16 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, IF-Fro, ELISA	<b>Positive Controls:</b> WB : mouse colon tissue, human colon tissue, pig colon tissue IHC : mouse pancreas tissue, IF-P : mouse small intestine tissue, IF-Fro : mouse small intestine tissue,
<b>Cited Applications:</b> WB, IHC	
<b>Species Specificity:</b> human, mouse, rat, pig	
<b>Cited Species:</b> human, mouse	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

Zymogen granule protein 16 (ZG16) has a Jacalin-like lectin domain, which is mainly expressed by mucus-secreting cells, including goblet cells in the intestine. It's reported that ZG16 expression was significantly decreased in colorectal cancer compared to normal tissue. ZG16 gene expression and copy number variations (CNV) were associated with multiple molecular and clinicopathological features of CRC including MSI, MLH1 silencing and so on. It's found that ZG16 is negatively correlated with lymphatic invasive and distant metastasis. Besides, overexpression of ZG16 blocks PD-L1 expression in colorectal cancer, and promotes NK cells survival and proliferation. Very importantly, ZG16 suppresses colorectal tumor growth via the immune system. (PMID: 33360840, 21893569)

## Notable Publications

Author	Pubmed ID	Journal	Application
Hui Meng	39261658	Oncogene	WB
Aojia Zhuang	37158593	Elife	IHC

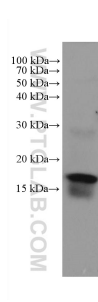
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

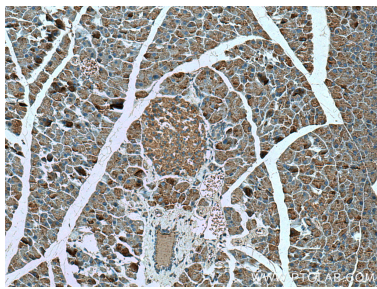
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

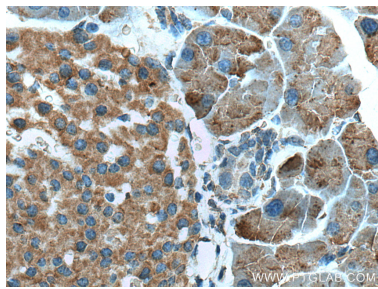
Selected Validation Data



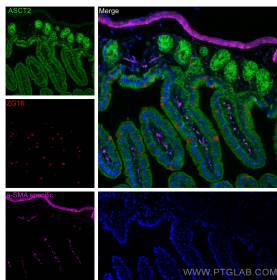
mouse colon tissue were subjected to SDS PAGE followed by western blot with 67389-1-Ig (ZG16 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



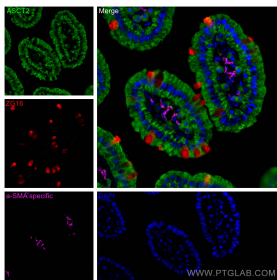
Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue slide using 67389-1-Ig (ZG16 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



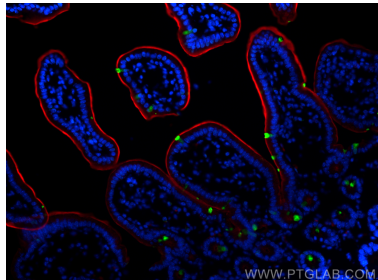
Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue slide using 67389-1-Ig (ZG16 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse small intestine tissue using ZG16 antibody (67389-1-Ig, Clone: 1A7B9) at dilution of 1:400 and CoraLite® 594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), ASCT2 antibody (20350-1-AP, green), CoraLite® Plus 647 smooth muscle actin specific antibody (CL647-80008, Clone: 5H7, Magenta).



Immunofluorescent analysis of (4% PFA) fixed mouse small intestine tissue using ZG16 antibody (67389-1-Ig, Clone: 1A7B9) at dilution of 1:400 and CoraLite® 594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), ASCT2 antibody (20350-1-AP, green), CoraLite® Plus 647 smooth muscle actin specific antibody (CL647-80008, Clone: 5H7, Magenta).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse small intestine tissue using ZG16 antibody (67389-1-Ig, Clone: 1A7B9) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1), CD163 antibody (83285-4-RR, Clone: 240233A3, red).