# **Product Datasheet**

# ATG16L1 Antibody NB110-60928SS

Unit Size: 0.025 ml

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

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Updated 6/15/2014 v.20.1

## NB110-60928SS

ATG16L1 Antibody

Unit Size Concentration 0.8 mg/ml Storage Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles. Clonality Polyclonal Preservative 0.1% Sodium Azide Purity Immunogen affinity purified Buffer PBS, 30% glycerol Target Molecular Weight 68 kDa  Product Description Host Rabbit Gene ID 55054 Gene Symbol ATG16L1 Species Human, Mouse, Rat, Bovine, Canine, Primate Species Reactivity Human, rat, bovine, canine, mouse and primate. Immunogen A synthetic peptide within residues 1-100 of human ATG16L1 protein. [Swiss-prot# Q676U5]  Product Application Details  Mestern Blot, Electron Microscopy, Immunohistochemistry, Immunohistochemistry-Paraffin Recommended Dilutions Electron Microscopy 1:10-1:500, Immunohistochemistry, Immunohistochemistry-Paraffin 1:250, Western Blot 0.5-2 ug/ml Application Notes  In Western blot analysis, a specific band is seen at ~68kDa. Electron Microscopy and IHC-P applications are reported in scientific literature (PMIDs 22531915 and		
Concentration  Storage  Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.  Clonality  Polyclonal  Preservative  0.1% Sodium Azide  Purity  Immunogen affinity purified  Buffer  PBS, 30% glycerol  68 kDa  Product Description  Host  Rabbit  Gene ID  55054  Gene Symbol  ATG16L1  Species  Human, Mouse, Rat, Bovine, Canine, Primate  Species Human, rat, bovine, canine, mouse and primate.  Immunogen  A synthetic peptide within residues 1-100 of human ATG16L1 protein. [Swiss-Prot# Q676U5]  Product Application Details  Applications  Western Blot, Electron Microscopy, Immunohistochemistry, Immunohistochemistry-Paraffin  Recommended Dilutions  Electron Microscopy 1:10-1:500, Immunohistochemistry, Immunohistochemistry-Paraffin 1:250, Western Blot 0.5-2 ug/ml  In Western blot analysis, a specific band is seen at ~68kDa. Electron Microscopy and IHC-P applications are reported in scientific literature (PMIDs 22531915 and	Product Information	
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Buffer PBS, 30% glycerol  Target Molecular Weight 68 kDa  Product Description  Host Rabbit  Gene ID 55054  Gene Symbol ATG16L1  Species Human, Mouse, Rat, Bovine, Canine, Primate  Species Reactivity Human, rat, bovine, canine, mouse and primate.  Immunogen A synthetic peptide within residues 1-100 of human ATG16L1 protein. [Swiss-prot# Q676U5]  Product Application Details  Applications Western Blot, Electron Microscopy, Immunohistochemistry, Immunohistochemistry-Paraffin  Recommended Dilutions Electron Microscopy 1:10-1:500, Immunohistochemistry, Immunohistochemistry-Paraffin 1:250, Western Blot 0.5-2 ug/ml  Application Notes In Western blot analysis, a specific band is seen at ~68kDa. Electron Microscopy and IHC-P applications are reported in scientific literature (PMIDs 22531915 and	Preservative	0.1% Sodium Azide
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Immunohistochemistry-Paraffin  Recommended Dilutions  Electron Microscopy 1:10-1:500, Immunohistochemistry, Immunohistochemistry-Paraffin 1:250, Western Blot 0.5-2 ug/ml  Application Notes  In Western blot analysis, a specific band is seen at ~68kDa. Electron Microscopy and IHC-P applications are reported in scientific literature (PMIDs 22531915 and	Product Application Details	
Paraffin 1:250, Western Blot 0.5-2 ug/ml  Application Notes  In Western blot analysis, a specific band is seen at ~68kDa. Electron Microscopy and IHC-P applications are reported in scientific literature (PMIDs 22531915 and	Applications	
and IHC-P applications are reported in scientific literature (PMIDs 22531915 and	Recommended Dilutions	
25060858 respectively).	Application Notes	



## **Images** Western Blot: ATG16L1 Antibody [NB110-60928] - Detection of 250 kDa -ATG16L1 using NB110-60928 in HCT116 whole cell extracts. Image 130 kDa from verified customer review. 90 kDa -70 kDa -ATG16L1 55 kDa -35 kDa -Western Blot: ATG16L1 Antibody [NB110-60928] - Detection of kDa ATG16L1 using NB110-60928 in HeLa whole cell extracts. 97 ATG16L1 51-39-28-

#### **Publications**

Sun KT, Chen MY, Tu MG et al. MicroRNA-20a regulates autophagy related protein-ATG16L1 in hypoxia-induced osteoclast differentiation. Bone. 2014 Dec 05 [PMID: 25485521] (WB, Mouse)

#### Details:

ATG16L1 antibody used for WB on RAW264.7 cells subjected to RANKL and M-CSF mediated osteoclast differentiation as well as hypoxic stress (Fig. 1E). WB also performed on RAW264.7 cells transduced with miR-20a mimics or antagomiR, and Bafiliomycin under hypoxia (Fig. 3B)

Tang JY, Hsi E, Huang YC et al. Overexpression of Autophagy-Related 16-Like 1 in Patients with Oral Squamous Cell Carcinoma. Pathol. Oncol. Res. 2014 Jul 25 [PMID: 25060858] (IHC-P, Human)

#### Details:

ATG16L1 antibody used for IHC-P (1:250 dilution) on Human Oral Squamous Cell Carcinoma tissue sections - formalin fixation, 4um paraffin sections, heat induced antigen retrieval with 0.1 M citrate buffer pH 6.0 for 10 min, primary incubation for 30 minutes RT followed by detectionwith REAL Envision Detection System - Peroxidase/DAB. Fig 1 shows cytoplasmic staining / immunoreactivity score (IRS).

Curtis S, Jones CJ, Garrod A et al. Identification of Autophagic Vacuoles and Regulators of Autophagy in Villous Trophoblast from Normal Term Pregnancies and in Fetal Growth Restriction J Matern Fetal Neonatal Med 2012 Oct 8 [PMID: 23039021] (IHC, Human)

Tattoli I, Sorbara MT, Vuckovic D et al. Amino Acid starvation induced by invasive bacterial pathogens triggers an innate host defense program Cell Host Microbe 2012 Jun 14 [PMID: 22704617] (WB, Human)

Juarez E, Carranza C, Hernandez-Sanchez F et al. NOD2 enhances the innate response of alveolar macrophages to Mycobacterium tuberculosis in humans. Eur J Immunol. 2011

Juarez E, Carranza C, Hernandez-Sanchez F, Leon-Contreras JC, Hernandez-Pando R, Escobedo D, Torres M, Sada E. NOD2 enhances the innate response of alveolar macrophages to Mycobacterium tuberculosis in humans. Eur J Immunol;42(4):880-9. 2012 Apr. [PMID: 22531915] (Human)

Plantinga TS, Crisan TO, Oosting M. Crohn's disease-associated ATG16L1 polymorphism modulates proinflammatory cytokine responses selectively upon activation of NOD2. Gut. 2011 Mar 15. [PMID: 21406388]



#### **Procedures**

#### Protocol specific for apg16 Antibody (NB110-60928)

Western Blot Protocol

- 1. Perform SDS-PAGE (4-12% MOPS) on samples to be analyzed, loading 34 ug of total protein per lane.
- 2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
- 3. Rinse membrane with dH2O and then stain the blot using Ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
- 4. Rinse the blot in TBS for approximately 5 minutes.
- 5. Block the membrane using 5% non-fat dry milk + 1% BSA in TBS, overnight at 4C.
- 6. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
- 7. Dilute the rabbit anti-ATG16L1 primary antibody (NB 110-60928) in blocking buffer and incubate 1.5 hours at room temperature.
- 8. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
- 9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
- 10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).
- 11. Apply the detection reagent of choice in accordance with the manufacturers instructions (Pierce Pico ECL).

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.





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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.

For more information on our guarantee, please visit www.novusbio.com/guarantee.

