

Rabbit OTULIN Polyclonal Antibody | anti-OTULIN antibody

Anti-OTULIN Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19319	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

OTULIN; Polyclonal Antibody; Anti-OTULIN Antibody; FAM105B; Ubiquitin thioesterase otulin; Deubiquitinating enzyme otulin; OTU domain-containing deubiquitinase with linear linkage specificity; Ubiquitin thioesterase Gumbly; deubiquitinase with linear linkage specificity; anti-OTULIN antibody

PRODUCT SPECIFICATIONS

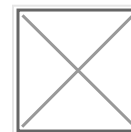
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for OTULIN detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-OTULIN antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA (Direct ELISA)
Application Notes	WB: 0.1-0.25ug/ml Human, Mouse, Rat IHC-P: 2-5ug/ml Human ICC/IF: 5ug/ml Human FC/FACS/FCM: 1-3ug/1x106 cells Human Direct ELISA: 0.1-0.5ug/ml Human
Immunogen	E Coli-derived human OTULIN recombinant protein (Position: A49-L352).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM (Flow Cytometry)

Figure 7. Flow Cytometry analysis of 293T cells using anti-OTULIN antibody (AAA19319). Overlay histogram showing 293T cells stained with AAA19319 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-OTULIN Antibody (AAA19319, 1µg/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 6. IHC analysis of OTULIN using anti-OTULIN antibody (AAA19319). OTULIN was detected in paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-OTULIN Antibody (AAA19319) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



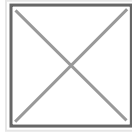
IHC (Immunohistochemistry)

Figure 5. IHC analysis of OTULIN using anti-OTULIN antibody (AAA19319). OTULIN was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-OTULIN Antibody (AAA19319) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



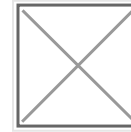
IHC (Immunohistochemistry)

Figure 4. IHC analysis of OTULIN using anti-OTULIN antibody (AAA19319). OTULIN was detected in paraffin-embedded section of human bladder cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-OTULIN Antibody (AAA19319) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 3. IHC analysis of OTULIN using anti-OTULIN antibody (AAA19319). OTULIN was detected in paraffin-embedded section of human appendicitis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-OTULIN Antibody (AAA19319) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



WB (Western Blot)

Figure 2. Western blot analysis of OTULIN using anti-OTULIN antibody (AAA19319). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50 µg of sample under reducing conditions. Lane 1: human HELA whole cell lysates. Lane 2: human THP-1 whole cell lysates. Lane 3: human K562 whole cell lysates. Lane 4: rat liver tissue lysates. Lane 5: mouse liver tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-OTULIN antigen affinity purified polyclonal antibody (Catalog # AAA19319) at 0.25 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # with Tanon 5200 system). A specific band was detected for OTULIN at approximately 43-45KD. The expected band size for OTULIN is at 43-45KD.

ADDITIONAL INFORMATION

Related Product Information for anti-OTULIN antibody	This gene encodes a member of the peptidase C65 family of ubiquitin isopeptidases. Members of this family remove ubiquitin from proteins. The encoded enzyme specifically recognizes and removes M1(Met1)-linked, or linear, ubiquitin chains from protein substrates. Linear ubiquitin chains are known to regulate the NF-kappa B signaling pathway in the context of immunity and inflammation. Mutations in this gene cause a potentially fatal autoinflammatory syndrome in human patients.
References	1. Damgaard, R. B., Walker, J. A., Marco-Casanova, P., Morgan, N. V., Titheradge, H. L., Elliott, P. R., McHale, D., Maher, E. R., McKenzie, A. N. J., Komander, D. The deubiquitinase OTULIN is an essential negative regulator of inflammation and autoimmunity. <i>Cell</i> 166: 1215-1230, 2016. 2. Gross, M. B. Personal Communication. Baltimore, Md. 3/25/2014. 3. Heger, K., Wickliffe, K. E., Ndoja, A., Zhang, J., Murthy, A., Dugger, D. L., Maltzman, A., de Sousa E Melo, F., Hung, J., Zeng, Y., Verschueren, E., Kirkpatrick, D. S., and 10 others. OTULIN limits cell death and inflammation by deubiquitinating LUBAC. <i>Nature</i> 559: 120-124, 2018.

NCBI AND UNIPROT INFORMATION

NCBI GI #	115334675
NCBI GeneID	90268
NCBI Accession #	NP_612357.4
NCBI GenBank Nucleotide #	NM_138348.4
UniProt Accession #	Q96BN8 ; Q8NAS0 ; Q96IA3 ; D3DTD3
Molecular Weight	40,263 Da
NCBI Official Full Name	ubiquitin thioesterase otulin

NCBI Official Synonym Full Names	OTU deubiquitinase with linear linkage specificity
NCBI Official Symbol	OTULIN
NCBI Official Synonym Symbols	GUM; FAM105B
NCBI Protein Information	ubiquitin thioesterase otulin; gumby; protein FAM105B; ubiquitin thioesterase Gumby; deubiquitinating enzyme otulin; family with sequence similarity 105, member B; OTU domain-containing deubiquitinase with linear linkage specificity
UniProt Protein Name	Ubiquitin thioesterase otulin
UniProt Gene Name	OTULIN
UniProt Synonym Gene Names	FAM105B
UniProt Entry Name	OTUL_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/otulin-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-direct-elisa-elisa/19319>