

## Rabbit anti-Human SPPL3 Polyclonal Antibody | anti-SPPL3 antibody

SPPL3 Antibody (N-term)

|                               |                       |                            |                                            |
|-------------------------------|-----------------------|----------------------------|--------------------------------------------|
| CATALOG #<br><b>AAA284768</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>ELISA, Western Blot</b> |
|-------------------------------|-----------------------|----------------------------|--------------------------------------------|

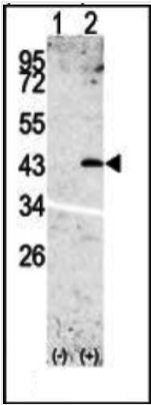
### PRODUCT SYNONYMS

SPPL3; Polyclonal Antibody; SPPL3 Antibody (N-term); Signal peptide peptidase-like 3; SPP-like 3; 3423-; Intramembrane protease 2; IMP-2; Presenilin homologous protein 1; PSH1; Presenilin-like protein 4; IMP2; PSL4; anti-SPPL3 antibody

### PRODUCT SPECIFICATIONS

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Reactivity                                      | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Clonality                                       | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Isotype                                         | Rabbit IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Specificity                                     | This SPPL3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 50-81 amino acids from the N-terminal region of human SPPL3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Purity/Purification                             | Purified Rabbit Polyclonal Antibody (Pab)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Form/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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Sequence Positions                              | 50-81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Sequence Length                                 | 169                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Applicable Applications for anti-SPPL3 antibody | ELISA, WB (Western Blot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Cellular Location                               | Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus. Membrane; Multi-pass membrane protein; Lumenal side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Tissue Location                                 | Widely expressed (PubMed:15385547). Expressed in the brain (PubMed:11978763)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Function                                        | Intramembrane-cleaving aspartic protease (I-CLiP) that cleaves type II membrane protein substrates in or close to their luminal transmembrane domain boundaries (PubMed: , PubMed: , PubMed: ). Acts like a sheddase by mediating the proteolytic release and secretion of active site-containing ectodomains of glycan-modifying glycosidase and glycosyltransferase enzymes such as MGAT5, B4GAT1 and B4GALT1 (PubMed: , PubMed: ). Catalyzes the intramembrane cleavage of the envelope glycoprotein gp130 and/or the leader peptide gp18LP of the simian foamy virus independent of prior ectodomain shedding by furin or furin-like proprotein convertase (PC)-mediated cleavage proteolysis (PubMed: ). May also have the ability to serve as a shedding protease for subsequent intramembrane proteolysis by SPPL2A and SPPL2B of the envelope glycoprotein gp130 (PubMed: ). Plays a role in the regulation of cellular glycosylation processes (PubMed: ). Required to link T-cell antigen receptor (TCR) and calcineurin-NFAT signaling cascades in lymphocytes by promoting the association of STIM1 and ORAI1 during store-operated calcium entry (SOCE) in a protease-independent manner (PubMed: ). |
| Preparation and 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

IMAGES



**WB (Western Blot)**  
Western blot analysis of SPPL3(arrow) using rabbit polyclonal SPPL3 Antibody (N-term).  
293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the SPPL3 gene (Lane 2) (Origene Technologies).

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-SPPL3 antibody | Signal peptide peptidase (SPP) is an aspartyl protease that mediates clearance of signal peptides by proteolysis within the endoplasmic reticulum (ER). Like presenilins, SPP contains a critical GXGD motif in its C-terminal catalytic center. SPPL3 is one of several presenilin homologues/SPP-like proteins (PSHs/SPPL) that have been identified. |
| Product Categories/Family for anti-SPPL3 antibody   | Cell Biology; Signal transduction                                                                                                                                                                                                                                                                                                                       |
| References                                          | Grigorenko, A.P., et al., Biochemistry Mosc. 67(7):826-835 (2002).<br>Weihofen, A., et al., Science 296(5576):2215-2218 (2002).                                                                                                                                                                                                                         |

NCBI AND UNIPROT INFORMATION

|                                  |                                     |
|----------------------------------|-------------------------------------|
| NCBI GI #                        | 33413418                            |
| NCBI GeneID                      | 121665                              |
| NCBI Accession #                 | NP_620584.2                         |
| NCBI GenBank Nucleotide #        | NM_139015.4                         |
| UniProt Accession #              | Q8TCT6; Q3MJ04; Q8TAU4; Q96DD9      |
| NCBI Official Full Name          | signal peptide peptidase-like 3     |
| NCBI Official Synonym Full Names | signal peptide peptidase like 3     |
| NCBI Official Symbol             | SPPL3                               |
| NCBI Official Synonym Symbols    | IMP2; PSH1; PSL4; PRO4332; MDHV1887 |
| NCBI Protein Information         | signal peptide peptidase-like 3     |
| UniProt Protein Name             | Signal peptide peptidase-like 3     |
| UniProt Gene Name                | SPPL3                               |
| UniProt Synonym Gene Names       | IMP2; PSL4; SPP-like 3; IMP-2; PSH1 |
| UniProt Entry Name               | SPPL3_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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)  
Online datasheet: <https://www.aaabiotech.com/polyclonal/sppl3-antibody-western-blot-elisa/284768>