

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse Beclin 1 in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Beclin 1 Met12-Gln239 Accession # Q14457
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

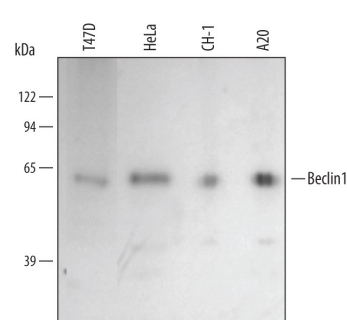
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below

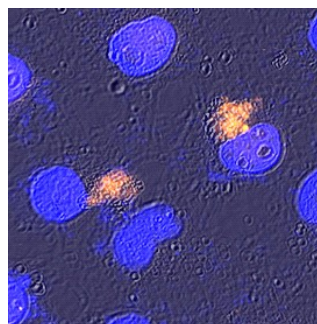
## DATA

### Western Blot



**Detection of Human/Mouse Beclin 1 by Western Blot.** Western blot shows lysates of T47D human breast cancer cell line, HeLa human cervical epithelial carcinoma cell line, CH1 mouse B cell lymphoma cell line, and A20 mouse B cell lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse Beclin 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5295) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Beclin 1 at approximately 60 kDa (as indicated). This experiment was conducted using Immunoblot Buffer Group 2.

### Immunocytochemistry



**Beclin 1 in HeLa Human Cell Line.** Beclin 1 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human/Mouse Beclin 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5295) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (yellow; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to autophagosomes. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Beclin 1 (Bcl-2 interacting coiled-coil protein; also known as ATG6) is a 60 kDa member of the Beclin family of proteins. It is part of a lipid-kinase complex that includes UVRAG and PI3 and induces autophagy; in the presence of Bcl-2, autophagy is repressed. Beclin 1 is widely expressed but abundantly found in mammary epithelium, glia and neurons. Human Beclin 1 is 450 amino acids (aa) in length and contains a Bcl-2 binding domain (aa 88-150), a nuclear export signal motif (aa 180-189), a coiled-coil region (aa 142-270), and an evolutionary conserved domain (aa 244-337). There is one potential alternate start site at Met88. Over aa 12-239, human Beclin 1 is 98% aa identical to mouse Beclin 1.