

Store at
-20C
#59187**Beclin-1 Complex Antibody Sampler Kit**

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1 Kit (6 x 20 microliters)

For Research Use Only. Not for Use in Diagnostic Procedures.

| Product Includes | Product # | Quantity | Mol. Wt | Isotype/Source |
|--|-----------|----------|---------|----------------|
| Beclin-1 (D40C5) Rabbit mAb | 3495 | 20 µl | 60 kDa | Rabbit IgG |
| PI3 Kinase Class III (D9A5) Rabbit mAb | 4263 | 20 µl | 100 kDa | Rabbit |
| PIK3R4 Antibody | 14580 | 20 µl | 153 kDa | Rabbit |
| Atg14 (D1A1N) Rabbit mAb | 96752 | 20 µl | 65 kDa | Rabbit IgG |
| UVRAG (D2Q1Z) Rabbit mAb | 13115 | 20 µl | 90 kDa | Rabbit IgG |
| Rubicon (D9F7) Rabbit mAb | 8465 | 20 µl | 130 kDa | Rabbit IgG |
| Anti-rabbit IgG, HRP-linked Antibody | 7074 | 100 µl | | Goat |

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Beclin-1 Complex Antibody Sampler Kit provides an economical means of detecting proteins that are part of the Beclin-1 complexes. The kit includes enough antibodies to perform two western blot experiments with each primary antibody.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

Background

A number of studies have identified distinct complexes involving Beclin-1 and PI3K Kinase Class III with specific roles in autophagy and vesicle trafficking (1,2). These complexes commonly contain Beclin-1, PI3KC3/VSP34, and PIK3R4/VPS15 and function to catalyze the phosphorylation of phosphatidylinositol at the D3 position, producing phosphatidylinositol-3-phosphate. Specificity of PI3KC3 activity is regulated by additional binding partners. Complex 1 contains Atg14 which is required for early stages of autophagosome nucleation (3,4). Complex 2 lacks Atg14, but instead contains UVRAG, and is important for autophagosome maturation and endocytic trafficking (4-6). A third complex, containing both UVRAG and Rubicon, negatively regulates canonical autophagy (7,8). Importantly, this complex containing Rubicon is critical for a related process of LC3-associated phagocytosis (LAP) in which extracellular pathogens binding to cell surface receptors are engulfed by a single membrane phagosome and degraded by the lysosome (9,10).

Background References

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