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ULK1 Antibody
Catalog # ASM10520

Specification

ULK1 Antibody - Product Information

Application	**ICC/IF, WB**
Primary Accession	O75385
Other Accession	NP_003556.1
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**

Description
Rabbit Anti-Human ULK1 Polyclonal

Target/Specificity
Detects ~100 kDa.

Other Names
Unc-51 like kinase 1 (C. elegans) Antibody, Autophagy related protein 1 homolog Antibody, Autophagy-related protein 1 homolog Antibody, FLJ38455 Antibody, Serine/threonine-protein kinase ULK1 Antibody, Unc51.1 Antibody, ATG1A Antibody, UNC51, C. elegans, homolog of Antibody, EC:2.7.11.1 Antibody, Serine/threonine protein kinase Unc51.1 Antibody, FLJ46475 Antibody, ATG 1 Antibody, hATG1 Antibody, ATG1 Antibody, Unc-51-like kinase 1 Antibody, Serine/threonine protein kinase ULK1 Antibody, ULK1 Antibody, Unc 51 like kinase 1 Antibody, KIAA0722 Antibody, UNC 51 Antibody, ULK 1 Antibody, ULK1_HUMAN Antibody, UNC51 Antibody, Unc 51 (C. elegans) like kinase 1 Antibody, ATG1 autophagy related 1 homolog Antibody,

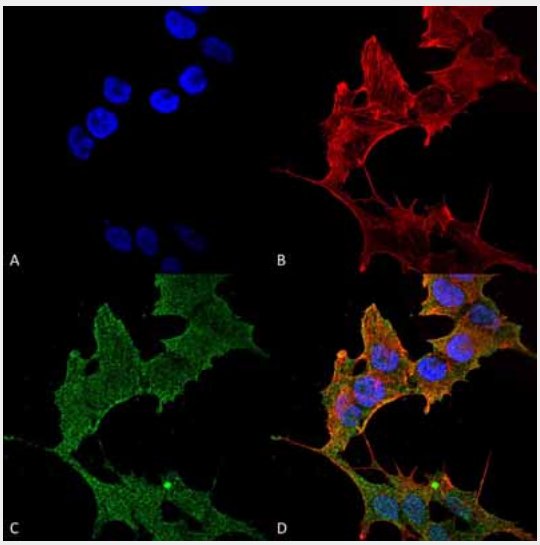
Immunogen
Synthetic peptide from the mid-protein of Human ULK1 (aa. 567-577)

Purification
Peptide Affinity Purified

Storage	**-20ºC**

Storage Buffer
PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-ULK1 Polyclonal Antibody (ASM10520). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-ULK1 Polyclonal Antibody (ASM10520) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cytoplasm, Preautophagosomal Structure. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) ULK1 Antibody (D) Composite.

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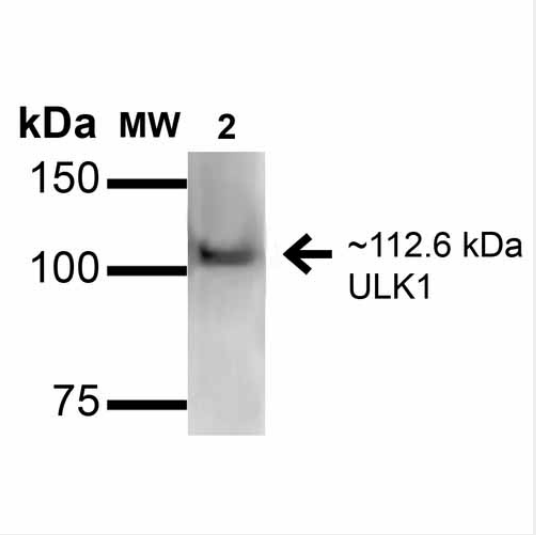
Certificate of Analysis
A 1:1000 dilution of SPC-640 was sufficient for detection of ULK1 in 15 µg of Human HeLa Cell Lysates by ECL immunoblot analysis using goat anti-rabbit IgG:HRP as the secondary antibody.

Cellular Localization
Cytoplasm | Cytosol | Preautophagosomal Structure

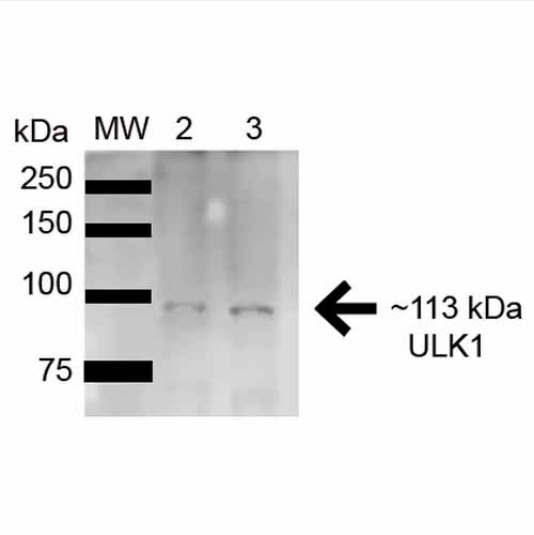
ULK1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



Western blot analysis of Human HeLa and 293Trap cell lysates showing detection of 112.6 kDa ULK1 protein using Rabbit Anti-ULK1 Polyclonal Antibody (ASM10520). Lane 1: Molecular Weight Ladder (MW). Lane 2: Human HeLa and 293Trap cell lysates. Load: 15 µg . Block: 5% Skim Milk in 1X TBST. Primary Antibody: Rabbit Anti-ULK1 Polyclonal Antibody (ASM10520) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: 112.6 kDa.



Western blot analysis of Rat Brain cell lysates showing detection of ~112.6kDa ULK1 protein using Rabbit Anti-ULK1 Polyclonal Antibody (ASM10520). Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat Brain cell lysates. Load: 15 µg . Block: 2% GE Healthcare Blocker (RT, 60 minutes). Primary Antibody: Rabbit Anti-ULK1 Polyclonal

Antibody (ASM10520) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Rabbit IgG: HRP at 1/2000 for 60 min at RT. Color Development: ECL solution for 6 min at RT. Predicted/Observed Size: ~112.6kDa.

ULK1 Antibody - Background

UNC-51 like kinase 1 (ULK1) is widely expresed and contains an amino-terminal kinase domain followed by a central proline-serine rich domain and a highly conserved carboxy-terminal domain. It has been linked to axon growth and is essential for autophagy. Structurally, ULK1 is similar to ATG1, and it appears that both Atg1/ULK1 can bind to several ATG proteins regulating phosphorylation states and protein trafficking.

ULK1 Antibody - References

1. Okazaki N., et al. (2000) Brain Res Mol Brain Res. 85: 1-12.
2. Young A.R., et al. (2006) J Cell Sci. 119: 3888-900.
3. Kamada Y., et al. (2000) J Cell Biol. 150: 1507-13.
4. Lee S.B, et al. (2007) EMBO Rep. 8: 360-5.
5. Hara T., et al. (2008) J Cell Biol. 181: 497-510.