#### For Research Use Only

# Phospho-ULK1 (Thr468) Polyclonal antibody

www.ptglab.com

**Purification Method:** 

WB 1:1000-1:8000 IF/ICC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

Catalog Number:29006-1-AP

**3 Publications** 

#### **Basic Information**

Catalog Number:

29006-1-AP

Size:

100ul , Concentration: 450 ug/ml by Nanodrop:

Source: Rabbit

Isotype: unc-51-like kinase 1 (C. elegans) IgG

Observed MW:

130-140 kDa

GenBank Accession Number:

NM 003565

**UNIPROT ID:** 

Full Name:

075385

GeneID (NCBI):

#### **Positive Controls:**

WB: λ phosphatase treated HeLa cells,

IF/ICC: HeLa cells,

## **Applications**

**Tested Applications:** WB, IF/ICC, ELISA Cited Applications:

Species Specificity:

human **Cited Species:** human, rat

## **Background Information**

Unc-51-like-kinase 1 (ULK1) is a target of both the mechanistic target of rapamycin (mTOR) and AMP activated protein kinase (AMPK), whose role is to facilitate the initiation of autophagy in response to starvation. ULK1 is phosphorylated on serine 638 and 758 sites by mTOR in nutrient-rich conditions, inhibiting ULK1 activation by disrupting its binding to AMPK. Upon glucose starvation, dissociation of mTOR from ULK1 and phosphorylation by AMPK leads to the activation of ULK1 activity. S467, S556, and T574 are sites responsible for regulating mitochondrial homeostasis during starvation. (PMID: 30517873, PMID: 21258367)

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Yi Zhou	35934162	Brain Res Bull	WB
Junli Zhang	39502521	Anal Cell Pathol (Amst)	WB
Yingwan Zhang	38477077	Environ Toxicol	WB

### Storage

Storage:

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

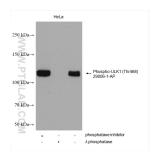
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

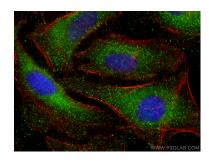
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

W: ptglab.com

## **Selected Validation Data**



Non-treated HeLa, phosphatase inhibitor treated and  $\lambda$  phosphatase treated HeLa cells were subjected to SDS PAGE followed by western blot with 29006-1-AP (Phospho-ULK1 (Thr468) antibody) at dilution of 1:4000 incubated at room temperature for 1 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Phospho-ULK1 (Thr468) antibody (29006-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red), CL594-Phalloidin (red).