

For Research Use Only



Phospho-ULK1 (Ser556) Recombinant antibody, PBS Only

Catalog Number: 80218-1-PBS

Basic Information

Catalog Number: 80218-1-PBS	GenBank Accession Number: NM_003565	Purification Method: Protein A purification
Size: 100ug , Concentration: 1mg/ml by Nanodrop;	GeneID (NCBI): 8408	CloneNo.: 2F5
Source: Rabbit	UNIPROT ID: O75385	
Isotype: IgG	Full Name: unc-51-like kinase 1 (C. elegans)	
	Observed MW: 140 kDa	

Applications

Tested Applications:
WB, Indirect ELISA

Species Specificity:
Human, mouse

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. The S556 site of ULK1 is one of the major AMPK-dependent phosphorylation sites. (PMID: 30517873, PMID: 21258367)

Storage

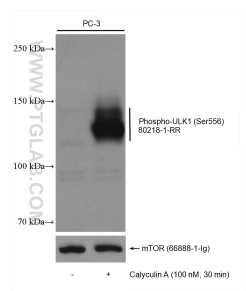
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

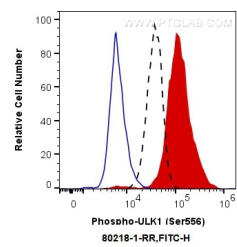
For technical support and original validation data for this product please contact:
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Selected Validation Data



Non-treated and Calyculin A treated PC-3 cells were subjected to SDS PAGE followed by western blot with 80218-1-RR (Phospho-ULK1 (Ser556) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was tripped and re-blotted with mouse anti-mTOR antibody 66888-1-Ig as loading control. This data was developed using the same antibody clone with 80218-1-PBS in a different storage buffer formulation.



1X10⁶ PC-3 cells untreated (dashed lines) or treated with Calyculin A (red) were intracellularly stained with 0.5 ug Anti-Human Phospho-ULK1 (Ser556) (80218-1-RR, Clone:2F5) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000, or 0.5 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH. This data was developed using the same antibody clone with 80218-1-PBS in a different storage buffer