

For Research Use Only

Phospho-ULK1 (Ser556) Recombinant antibody

Catalog Number: 80218-1-RR

15 Publications



Basic Information

Catalog Number: 80218-1-RR	GenBank Accession Number: NM_003565	Purification Method: Protein A purification
Size: 100ul , Concentration: 500 ug/ml by Nanodrop;	GeneID (NCBI): 8408	CloneNo.: 2F5
Source: Rabbit	UNIPROT ID: O75385	Recommended Dilutions: WB 1:2000-1:10000
Isotype: IgG	Full Name: unc-51-like kinase 1 (C. elegans)	
	Observed MW: 140 kDa	

Applications

Tested Applications: WB, ELISA, FC (Intra)	Positive Controls: WB : PC-3 cells, HeLa cells, Calyculin A treated HeLa cells, Calyculin A treated PC-3 cells
Cited Applications: WB, IHC	
Species Specificity: Human, mouse	
Cited Species: human, mouse, rat, goat	

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)

Notable Publications

Author	Pubmed ID	Journal	Application
Dominic Gross	36302750	Cell Death Dis	WB
Feng Xiaoli	34492938	J Hazard Mater	WB
Junli Zhang	35293266	Bioengineered	WB

Storage

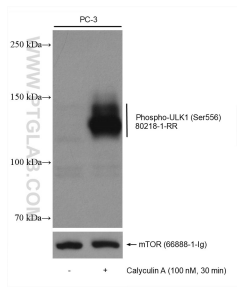
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

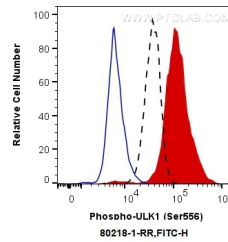
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Selected Validation Data



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 stripped and re-blotted with mouse anti-mTOR antibody 66888-1-Ig as loading control.



1×10^6 PC-3 cells untreated (dashed lines) or treated with Calyculin A (red) were intracellularly stained with 0.5 μ g Anti-Human Phospho-ULK1 (Ser556) (80218-1-RR, Clone:2F5) and CoraLite[®] 488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000, or 0.5 μ g Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.