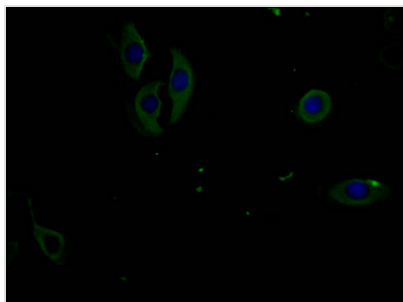




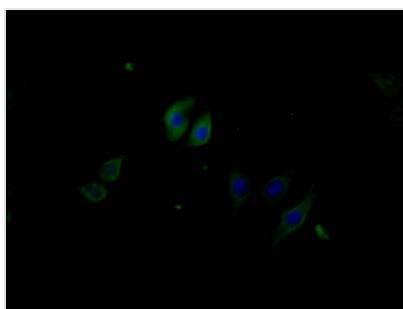
# Phospho-PERK(T981) Monoclonal Antibody

<b>Product Code</b>	CSB-MA007512PA981phHU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	Q9NZJ5
<b>Immunogen</b>	Recombinant Human Eukaryotic translation initiation factor 2-alpha kinase 3 protein (115-330AA)
<b>Raised In</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, IF; Recommended dilution: IF: 1:50-1:200
<b>Relevance</b>	Metabolic-stress sensing protein kinase that phosphorylates the alpha subunit of eukaryotic translation initiation factor 2 (eIF-2-alpha/EIF2S1) on 'Ser-52' during the unfolded protein response (UPR) and in response to low amino acid availability. Converts phosphorylated eIF-2-alpha/EIF2S1 either in a global protein synthesis inhibitor, leading to a reduced overall utilization of amino acids, or to a translation initiation activator of specific mRNAs, such as the transcriptional activator ATF4, and hence allowing ATF4-mediated reprogramming of amino acid biosynthetic gene expression to alleviate nutrient depletion. Serves as a critical effector of unfolded protein response (UPR)-induced G1 growth arrest due to the loss of cyclin-D1 (CCND1). Involved in control of mitochondrial morphology and function.
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
<b>Purification Method</b>	>95%, Protein G purified
<b>Clonality</b>	Monoclonal Antibody
<b>Product Type</b>	Monoclonal Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Target Names</b>	EIF2AK3
<b>Clone No.</b>	4A3A10

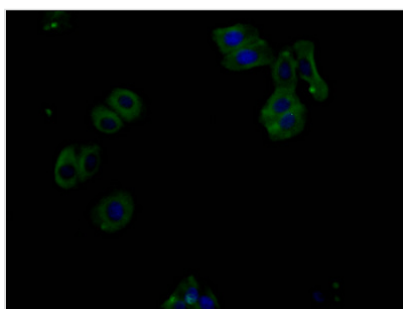
## Image



Immunofluorescence staining of A549 cells with CSB-MA007512PA981phHU at 1:100, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).



Immunofluorescence staining of HeLa cells with CSB-MA007512PA981phHU at 1:100, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).



Immunofluorescence staining of U87 cells with CSB-MA007512PA981phHU at 1:100, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).

## Usage

For Research Use Only. Not for use in diagnostic or therapeutic procedures.