

For Research Use Only

# PERK/EIF2AK3 Monoclonal antibody

Catalog Number: 68482-1-Ig **2 Publications**



## Basic Information

<b>Catalog Number:</b> 68482-1-Ig	<b>GenBank Accession Number:</b> BC126354	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 9451	<b>CloneNo.:</b> 3G3F2
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q9NZJ5	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG1	<b>Full Name:</b> eukaryotic translation initiation factor 2-alpha kinase 3	
<b>Immunogen Catalog Number:</b> AG18254	<b>Calculated MW:</b> 1116 aa, 125 kDa	
	<b>Observed MW:</b> 140 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : Daudi cells, HSC-T6 cells, Ramos cells, Jurkat cells, K-562 cells, HuH-7 cells, MCF-7 cells, HEK-293 cells, NIH/3T3 cells
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, pig	

## Background Information

PERK, also named as EIF2AK3 or PEK, belongs to the protein kinase superfamily, Ser/Thr protein kinase family and GCN2 subfamily. It acts as a metabolic-stress sensing protein kinase that phosphorylates the alpha subunit of eukaryotic translation initiation factor 2 (EIF2S1/ eIF-2-alpha) in response to various stress conditions. PERK and EIF2AK4 also have a functional role on regulating translation under non-stressed conditions, apart from their long established roles as stress kinases (PMID: 21638082). Defects in EIF2AK3 are the cause of Wolcott-Rallison syndrome (WRS). The molecular mass of PERK is 125 kDa and can be detected as 140 kDa or 170kDa due to some modifications such as glycosylation and phosphorylation (PMID: 20851775, 24371088, 21703327).

## Notable Publications

Author	Pubmed ID	Journal	Application
Xinyu Sun	39653741	Cancer Gene Ther	WB
Qiyuan Wang	39000093	Int J Mol Sci	WB

## Storage

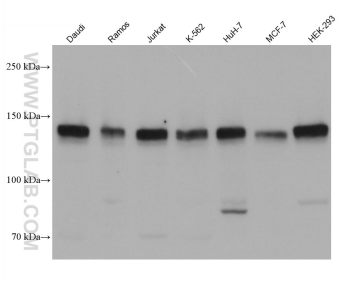
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

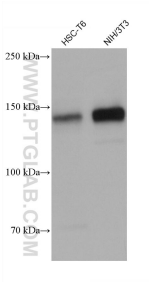
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# Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68482-1-Ig (PERK/EIF2AK3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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