

For Research Use Only

# DELE1 Polyclonal antibody

Catalog Number: 21904-1-AP **2 Publications**



## Basic Information

<b>Catalog Number:</b> 21904-1-AP	<b>GenBank Accession Number:</b> BC007855	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 9812	<b>Recommended Dilutions:</b> WB 1:200-1:1000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q14154	
<b>Isotype:</b> IgG	<b>Full Name:</b> KIAA0141	
<b>Immunogen Catalog Number:</b> AG14615	<b>Calculated MW:</b> 515 aa, 56 kDa	
	<b>Observed MW:</b> 56 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : mouse lung tissue,
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> human, mouse	
<b>Cited Species:</b> mouse	

## Background Information

DELE1, also known as KIAA0141, is a 515 amino acid protein, which localizes in Mitochondrion and is detected in liver, skeletal muscle, kidney, pancreas, spleen, thyroid, testis, ovary, small intestine and colon. DELE1 is essential for the induction of death receptor-mediated apoptosis through the regulation of caspase activation. Mitochondrial malfunction needs to be relayed to the cytosol, where an integrated stress response is triggered by the phosphorylation of eukaryotic translation initiation factor 2 $\alpha$  (eIF2 $\alpha$ ) in mammalian cells. eIF2 $\alpha$  phosphorylation is mediated by the four eIF2 $\alpha$  kinases GCN2, HRI, PERK and PKR, which are activated by diverse types of cellular stress. OMA1, a mitochondrial stress-activated protease; and DELE1, a little-characterized protein that we found was associated with the inner mitochondrial membrane. Mitochondrial stress stimulates OMA1-dependent cleavage of DELE1 and leads to the accumulation of DELE1 in the cytosol, where it interacts with HRI and activates the eIF2 $\alpha$  kinase activity of HRI. In addition, DELE1 is required for ATF4 translation downstream of eIF2 $\alpha$  phosphorylation.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jiahui Tang	36290724	Antioxidants (Basel)	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

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

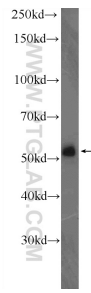
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## Selected Validation Data



mouse lung tissue were subjected to SDS PAGE followed by western blot with 21904-1-AP (KIAA0141 Antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.