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DELE Antibody

Catalog # ASC11504

Product Information

Application	WB, IF, E
Primary Accession	Q14154
Other Accession	NP_055588, 217330656
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	55920
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	DELE antibody can be used for detection of DELE by Western blot at 1 □g/mL. For immunofluorescence start at 20 □g/mL.

Additional Information

Gene ID	9812
Other Names	Death ligand signal enhancer, KIAA0141, DELE
Target/Specificity	KIAA0141;
Reconstitution & Storage	DELE antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	DELE Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DELE1 {ECO:0000303|PubMed:32132706, ECO:0000312|HGNC:HGNC:28969}
Function	Protein kinase activator that acts as a key activator of the integrated stress response (ISR) following various stresses, such as iron deficiency, mitochondrial stress or mitochondrial DNA breaks (PubMed:32132706, PubMed:32132707, PubMed:35388015, PubMed:37327776, PubMed:37550454, PubMed:37832546, PubMed:38340717). Detects impaired protein import and processing in mitochondria, activating the ISR (PubMed:35388015). May also required for the induction of death receptor-mediated apoptosis through the regulation of caspase activation (PubMed:20563667).
Cellular Location	[DAP3-binding cell death enhancer 1]: Mitochondrion. Mitochondrion outer

	membrane. Mitochondrion inner membrane. Note=Imported in the mitochondrial matrix in absence of stress, leading to its degradation by LONP1 (PubMed:37327776). Localizes at the mitochondrial surface in response to iron deficiency: iron deficiency impairs mitochondrial import, promoting localization at the mitochondrial surface and stabilization (PubMed:37327776). Associates with the mitochondrion inner membrane in response to mitochondrial stress, leading to its proteolytic processing by OMA1, and generation of the AP3-binding cell death enhancer 1 short form (DELE1(S) or S-DELE1) (PubMed:32132707)
Tissue Location	Detected in liver, skeletal muscle, kidney, pancreas, spleen, thyroid, testis, ovary, small intestine and colon

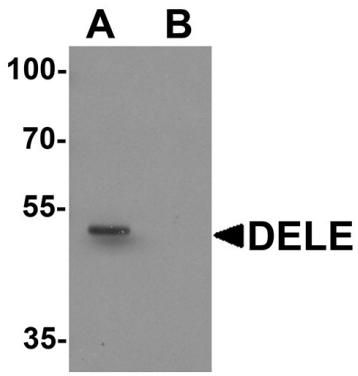
Background

DELE Antibody: DELE is a recently identified DAP3-binding protein that is thought to be important in the induction of death receptor-mediated apoptosis. Transfected cells that stably express DELE were found to be susceptible to apoptosis induction by TNF-α and TRAIL, whereas reducing DELE expression by siRNA rescued these cells from apoptosis induction. Furthermore, the reduction of DELE expression also inhibited the activation of caspase-3, caspase-8 and caspase-9 following stimulation by TNF-α, anti-Fas, or TRAIL, indicating the importance of DELE in apoptosis mediated by death receptors.

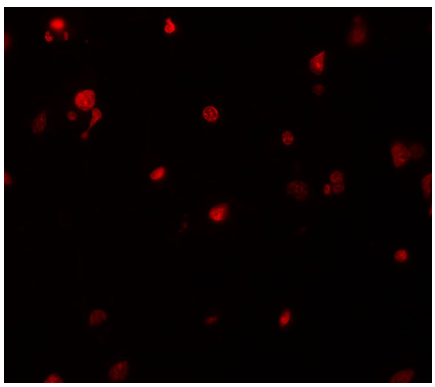
References

Harada T, Iwai A, Miyazaki T. Identification of DELE, a novel DAP-binding protein which is crucial for death receptor-mediated apoptosis induction. Apoptosis 2010; 15:1247-55.

Images



Western blot analysis of DELE in rat brain tissue lysate with DELE antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.



Immunofluorescence of DELE in human brain tissue with DELE antibody at 20 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.