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DELE Antibody
Catalog # ASC11504

Specification

DELE Antibody - Product Information

Application	**WB, IF**
Primary Accession	Q14154
Other Accession	NP_055588, 217330656
Reactivity	**Human, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**DELE antibody can be used for detection of DELE by Western blot at 1 µg/mL. For immunofluorescence start at 20 µg/mL.**

DELE Antibody - Additional Information

Gene ID	**9812**

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.

DELE Antibody - Protein Information

Name DELE1 (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 and mitochondrial stress (PubMed:32132706, PubMed:32132707, PubMed:35388015, PubMed:37327776). 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

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[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)

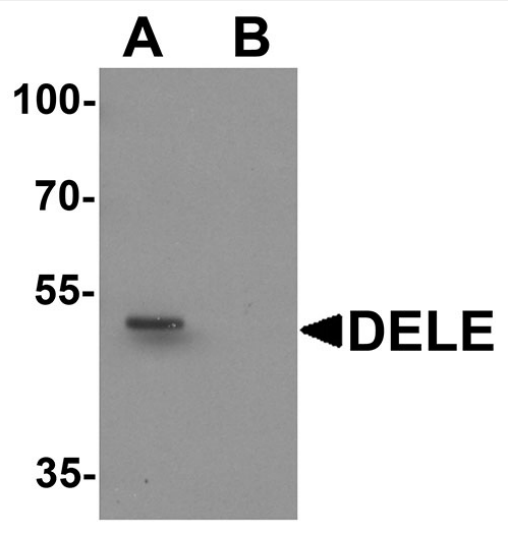
Tissue Location
Detected in liver, skeletal muscle, kidney, pancreas, spleen, thyroid, testis, ovary, small intestine and colon

DELE Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DELE Antibody - 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.

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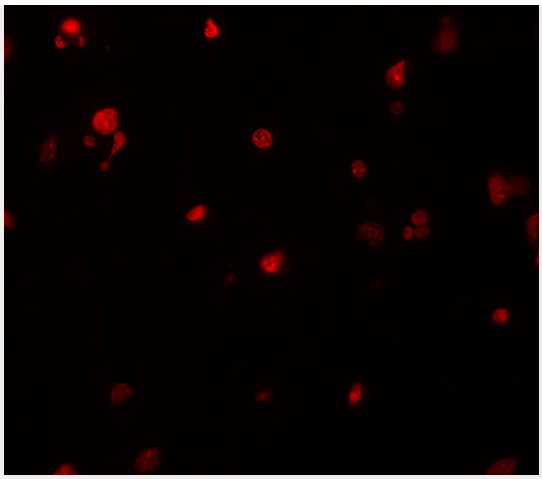

Immunofluorescence of DELE in human brain tissue with DELE antibody at 20 µg/mL.

DELE Antibody - 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.

DELE Antibody - 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.