

PLEKHM3 Antibody

Catalog # ASC11017

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q6ZWE6
Other Accession	Q6ZWE6 , 172046173
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	87166
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PLEKHM3 antibody can be used for detection of PLEKHM3 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	389072
Other Names	Pleckstrin homology domain-containing family M member 3, PH domain-containing family M member 3, PLEKHM3, PLEKHM1L
Target/Specificity	PLEKHM3;
Reconstitution & Storage	PLEKHM3 antibody can be stored at 4°C for three months and -20°C, 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	PLEKHM3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLEKHM3 (HGNC:34006)
Function	Involved in skeletal muscle differentiation. May act as a scaffold protein for AKT1 during muscle differentiation.
Cellular Location	Cytoplasm {ECO:0000250 UniProtKB:Q8BM47}. Golgi apparatus {ECO:0000250 UniProtKB:Q8BM47}. Cell membrane {ECO:0000250 UniProtKB:Q8BM47}. Note=Before differentiation of muscle cells, localized to the Golgi apparatus. During muscle differentiation shuttles to the plasma membrane. {ECO:0000250 UniProtKB:Q8BM47}

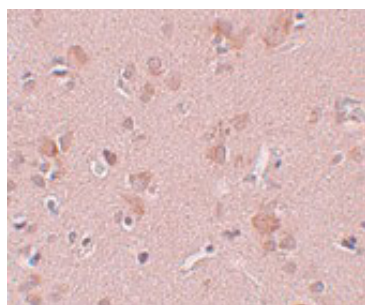
Background

PLEKHM3 Antibody: PLEKHM3, also known as DAPR, is a member of the M family of Pleckstrin homology domain-containing proteins. PLEKHM3 was initially identified through chromatin immunoprecipitation and CpG microarray analysis examining proteins regulated by myocyte-enhancing factor 2. In C2C12 myoblast cells, PLEKHM3 binds to the PI3K signaling member protein kinase B in the cytosol prior to differentiation into myotubes. Following the initiation of differentiation, PLEKHM3 was also found in membrane fractions. Knockdown of PLEKHM3 expression by RNAi resulted in the inhibition of myotube formation, suggesting that PLEKHM3 is a key component required by myoblasts for orchestrating their differentiation during myogenesis.

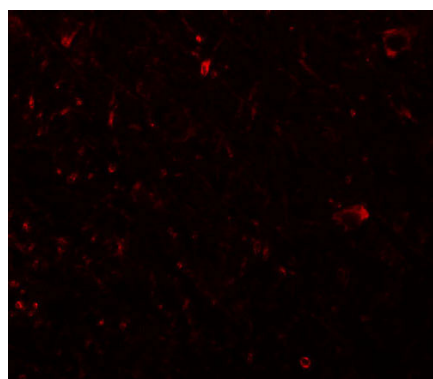
References

Virtanen C, Paris J, and Takahashi M. Identification and characterization of a novel gene, *dapr*, involved in skeletal muscle differentiation and protein kinase B signaling. *J. Biol. Chem.* 2009; 284:1636-43.

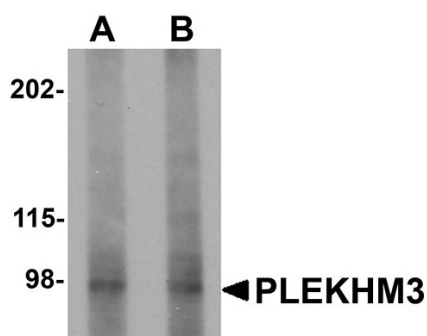
Images



Immunohistochemistry of PLEKHM3 in human brain tissue with PLEKHM3 antibody at 5 μ g/mL.



Immunofluorescence of PLEKHM3 in human brain tissue with PLEKHM3 antibody at 20 μ g/mL.



Western blot analysis of PLEKHM3 in mouse skeletal muscle tissue lysate with PLEKHM3 antibody at (A) 1 and (B) 2 μ g/mL.