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DOK7 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13568a

Product Information

Application	WB, E
Primary Accession	Q18PE1
Other Accession	NP_001158145.1, NP_775931.3
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32528
Calculated MW	53097
Antigen Region	26-55

Additional Information

Gene ID	285489
Other Names	Protein Dok-7, Downstream of tyrosine kinase 7, DOK7, C4orf25
Target/Specificity	This DOK7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 26-55 amino acids from the N-terminal region of human DOK7.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DOK7 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DOK7
Synonyms	C4orf25
Function	Probable muscle-intrinsic activator of MUSK that plays an essential role in neuromuscular synaptogenesis. Acts in aneural activation of MUSK and

	subsequent acetylcholine receptor (AchR) clustering in myotubes. Induces autophosphorylation of MUSK.
Cellular Location	Cell membrane; Peripheral membrane protein. Synapse. Note=Accumulates at neuromuscular junctions.
Tissue Location	Preferentially expressed in skeletal muscle and heart. Present in thigh muscle, diaphragm and heart but not in the liver or spleen (at protein level).

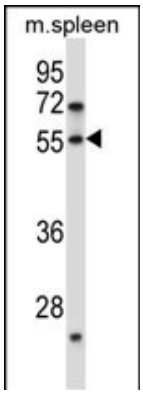
Background

The protein encoded by this gene is essential for neuromuscular synaptogenesis. The protein functions in aneural activation of muscle-specific receptor kinase, which is required for postsynaptic differentiation, and in the subsequent clustering of the acetylcholine receptor in myotubes. This protein can also induce autophosphorylation of muscle-specific receptor kinase. Mutations in this gene are a cause of familial limb-girdle myasthenia autosomal recessive, which is also known as congenital myasthenic syndrome type 1B. Alternative splicing results in multiple transcript variants.

References

Bergamin, E., et al. Mol. Cell 39(1):100-109(2010)
Srour, M., et al. Neuromuscul. Disord. 20(7):453-457(2010)
Maselli, R.A., et al. Hum. Mol. Genet. 19(12):2370-2379(2010)
Ben Ammar, A., et al. J. Neurol. 257(5):754-766(2010)
Vogt, J., et al. J. Med. Genet. 46(5):338-340(2009)

Images



DOK7 Antibody (N-term) (Cat. #AP13568a) western blot analysis in mouse spleen tissue lysates (35ug/lane).This demonstrates the DOK7 antibody detected the DOK7 protein (arrow).

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