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Datasheet for ABIN1401368
anti-PDZRN3 antibody (FITC)

Overview

Quantity:	100 µL
Target:	PDZRN3
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PDZRN3 antibody is conjugated to FITC
Application:	Western Blotting (WB), Immunofluorescence (Paraffin-embedded Sections) (IF (p))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human SEMCAP3/LNX3
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein A.

Target Details

Target:	PDZRN3
Alternative Name:	SEMCAP3 (PDZRN3 Products)
Background:	Synonyms: Ligand of Numb protein X 3, likely ortholog of mouse semaF cytoplasmic domain associated protein 3, LNX3, PDZ domain containing ring finger 3, Protein SEMACAP3, SEMACAP3, Semaphorin cytoplasmic domain associated protein, PZRN3_HUMAN. Background: PDZRN3 contains a RING-finger motif in its N-terminal region, two PDZ domains in

Target Details

its central region and a consensus-binding motif for PDZ domains at its C-terminus. It was identified in silico as a homolog of the protein known as LNX1 or SEMCAP1, which possesses ubiquitin ligase activity and binds the membrane protein Semaphorin 4C. However, PDZRN3 itself has not previously been characterized. We have now evaluated the properties and functions of PDZRN3. The PDZRN3 gene was shown to be expressed in various human tissues including the heart, skeletal muscle and liver and its expression in mouse skeletal muscle was developmentally regulated. Both the differentiation of C2C12 mouse skeletal myoblasts into myotubes and injury-induced muscle regeneration in vivo were found to be accompanied by up-regulation of PDZRN3. The differentiation-associated increase in the expression of PDZRN3 in C2C12 cells follows that of myogenin and precedes that of myosin heavy chain. Depletion of PDZRN3 by RNA interference inhibited the formation of myotubes as well as the associated up-regulation of myosin heavy chain in C2C12 cells. Our data suggest that PDZRN3 plays an essential role in the differentiation of myoblasts into myotubes by acting either downstream or independently of myogenin.

Gene ID: 23024

Pathways: [Skeletal Muscle Fiber Development](#)

Application Details

Application Notes: IF(IHC-P) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.

Handling

Expiry Date: 12 months