

Code No. 28111

**Anti-Dock6 Rabbit IgG Affinity Purify**Volume : 100 µg

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**Introduction** : Small GTPase of Rho family is one of signaling factors which control alteration of cellular morphology, cell division and differentiation, and plays an important role in regulation of generation and organogenesis at an individual level. Its functions are strictly regulated and its dysfunction causes many diseases such as immunological disease or neurodegenerative disease.

Dedicator of cytokinesis (Dock) 6 is a Rho family small GTPase activating factor (or exchange factor) activating Rac1 and Cdc42 specifically of the Rho family small GTPase, and is widely expressed molecule. It is noted that Dock6 is an important factor for proliferation and differentiation of neurocytes since it is more expressed especially in brain and sensory nerve tissues. Additionally, it is known as a responsible gene for Adams-Oliver syndrome, in which disorders of delivery and sexual differentiation are observed, and which is associated with metabolic disorder and intelligence disorder. It has been reported that mutations in Dock6 cause decline of its function and lead to abnormal cytoskeleton organization.

There are proteins, called Dock7 and Dock8, very similar to Dock6 in human but there are still many unclear points about their regulation systems.

**Antigen** : Synthetic peptide of a part of Human Dock6.

**Purification** : Purified with antigen peptide

**Form** : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN<sub>3</sub>

**How to use** : 1.0 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

**Stability** : Lyophilized product, 5 years at 2 – 8 °C  
: Solution, 2 years at –20 °C

**Application** : This antibody can be used for immunocytochemistry. The optimal concentration is about 10 - 20 µg/mL, however, the concentration should be optimized by each laboratory.

: This antibody can be used for western blotting in concentration of 0.2 - 2 µg /mL.

: This antibody can be used for immuno-precipitation in concentration of about 0.2 - 2 µg /test.

**Specificity** : Reacts with human, mouse and rat.

**Reference** : 1. Côté JF, Vuori K. Identification of an evolutionarily conserved superfamily of DOCK180-related proteins with guanine nucleotide exchange activity. *J Cell Sci.* 2002 Dec 15;115(Pt 24):4901-13.  
2. Miyamoto Y, Yamauchi J, Sanbe A, Tanoue A. Dock6, a Dock-C subfamily guanine nucleotide exchanger, has the dual specificity for Rac1 and Cdc42 and regulates neurite outgrowth. *Exp Cell Res.* 2007 Feb 15;313(4):791-804.  
3. Miyamoto Y, Yamauchi J. Cellular signaling of Dock family proteins in neural function. *Cell Signal.* 2010 Feb;22(2):175-82.

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