

Code No. 28113

Anti-Dock8 Rabbit IgG Affinity PurifyVolume : 100 µg

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) 8 is a Rho family small GTPase activating factor (or exchange factor) activating Rac1 and Cdc42 specifically of the Rho family small GTPase. It is considered that Dock8 is an important factor for proliferation and differentiation of immunocytes, neurocytes and stem cells since it is more expressed especially in immune system, nerve tissues and tissues of fetal stage. It is known as a responsible gene for hyper-IgE syndrome, and many types of genetic mutations have been reported. Additionally, relation with blood tumors has been pointed out.

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

Antigen : Synthetic peptide of a part of Human Dock8.

Purification : Purified with antigen peptide

Form : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN₃

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 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. Zhang Q, Davis JC, Lamborn IT, Freeman AF, Jing H, Favreau AJ, Matthews HF, Davis J, Turner ML, Uzel G, Holland SM, Su HC. Combined immunodeficiency associated with DOCK8 mutations. *N Engl J Med.* 2009 Nov 19;361(21):2046-55
3. Miyamoto Y, Yamauchi J. Cellular signaling of Dock family proteins in neural function. *Cell Signal.* 2010 Feb;22(2):175-82.

For research use only, not for use in diagnostic procedures.