Anti-Human/Mouse/Rat Phospho-LIMK1/2 (Thr508/505) Polyclonal Antibody

Polyclonal Antibody

Cat.NO.: PA01761

3th Edition

Description:LIMK 1 & 2 likely regulate aspects of the cytoskeleton, through control of the organization of actin filaments. They can phosphorylate an actin-binding protein, cofilin which binds to actin monomers and polymers and promotes the disassembly of actin filament.The phosphorylation of cofilin via LIMK inactivates this potential. LIMK1 is highly active in the brain and spinal chord, where it is believed to be involved in the development of nerve cells whilst LIMK2 is ubiquitously expressed in many adult tissues. LIMK1 may play an important role in areas of the brain that are responsible for processing visual-spatial information (visuospatial constructive cognition). These parts of the brain are important for visualizing an object as a set of parts and performing tasks such as writing, drawing, constructing models, and assembling puzzles. LIMK1 is specifically stimulated by Rac, one of the Rho family proteins, while LIMK2 activity is activated under the control of other Rho family members, Rho and Cdc42, suggesting that two distinct pathways exist in the Rho family driven actin cytoskeleton dynamics.

Antigen: Synthesized peptide derived from human LIMK-1/2 around the phosphorylation site of Thr508/505

Form:

How to use:1.0 ml distilled water will be added to the product

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

Dilution:PBS (pH7.4) containing 1% BSA

Application: This antibody can be used for western blotting in concentration of 1?5?g/ml.

Specificity:LIMK1 is Highest expression in both adult and fetal nervous system. Detected ubiquitously throughout the different regions of adult brain, with highest levels in the cerebral cortex. Expressed to a lesser extent in heart and skeletal muscle.LIMK2 isHighest expression in the placenta; moderate level in liver, lung, kidney, and pancreas. LIMK2a is found to be more abundant then LIMK2b in liver, colon, stomach, and spleen, while in brain, kidney, and placenta LIMK2b is the dominant form. In adult lung, both LIMK2a and LIMK2b is nearly equally observed.1 Publication