

Code No. 28035

## **Anti-Human**

PRAS40 (S183 Phosphorylated) Rabbit IgG Affinity Purify

Volume :  $100 \mu g$ 

Introduction: mTOR exists as two types of complexes called mTORC1 and mTORC2. mTORC1 is

regulated in activity by amino acid and inhibited specifically by a immunosuppressant "rapamycin". It is considered that PRAS40 is phosphorylated by mTORC1, for phosphorylation of PRAS40 (proline-rich Akt substrate of 40 kDa) which is a novel substrate of mTOR at Ser-183 (human) is induced by amino-acid stimulation and inhibited by rapamycin. It is known that mTORC1 is inhibited by AMP kinase system and then phosphorylation of PRAS40 at Ser-183 is inhibited by 2-Deoxyglucose (2DG) treatment inducing activation of AMP-kinase. It is shown that PRAS40 is dissociated from raptor which is a component of mTORC1 when it is phosphorylated by mTORC1, and it is assumed that phosphorylation of PRAS40 at Ser-183 is involved in controlling

mTOR signal-transducing pathway.

This antibody recognizes the phosphorylation of PRAS40 at Ser-183 (human).

Antigen : Synthetic peptide of the phosphorylated part of Human PRAS40 (QYAK(pS)LPVS)

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 western blotting in concentration of 1 - 3 μg /mL.

Reference: 1. Oshiro N, Takahashi R, Yoshino K, Tanimura K, Nakashima A, Eguchi S, Miyamoto

T, Hara K, Takehana K, Avruch J, Kikkawa U, Yonezawa K. The proline-rich Akt substrate of 40 kDa (PRAS40) is a physiological substrate of mammalian target of

rapamycin complex 1. J Biol Chem. 2007 Jul 13;282(28):20329-39.