IBL Data Sheet

Code No. 28141

Anti- Human
CAD(2194) Rabbit IgG Affinity Purify

Volume : 100 µg

Introduction : mTOR is a target molecule in mammalian used in rapamycin drug and it has been recognized as a central molecule that has a role of signaling for regulating proliferation and cell growth. Since DNA replication is essential for proliferation, regulating system of cell growth and amino-acid perception centrally related with mTOR deeply involve with the system of biosynthesis of nucleic acid. CAD (carbamoyl phosphate synthetase, aspartate transcarbamoylase, dihydroorotase) was discovered and found its important roles in the pathway of pyrimidine biosynthesis as a result of survey for molecules related to biosynthesis of nucleic acid in a molecular complex with raptor and mLST8. CAD catalyzes an initial step in de novo synthesizing system of pyrimidine synthesis and it is regulated by phosphorylation of other protein kinases. mLST8 bridges between CAD and mTOR and CAD plays a role as signaling in mTOR pathway by a cross-interaction with mLST8. This antibody is considered as a useful tool for research in mTOR signal pathway, especially for research in regulating system of biosynthesis of nucleic acid.

Antigen : Synthetic peptide in portion of C terminus of Human CAD（carbamoyl-phosphate synthetase 2,aspartate transcarbamylase,and dihydroorotase）（EVDSDPRAAYFRQAENG）

Purification : Purified with antigen peptide

Form : Lyophilized product from PBS containing 1 % BSA and 0.05 % NaN_3

How to use : 1.0 mL deionized water will be added to the product, then its concentration comes to 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 about 1 µg/mL
This antibody can be used for immune-precipitation in concentration of about 3 µg/mL

Specificity : Recognizes the C-terminus of human CAD (2194-2210 aa).

Reference : 1. Association of CAD, a multifunctional protein involved in pyrimidine synthesis, with mLST8, a component of the mTOR complexes. Nakashima A, Kawanishi I, Eguchi S, Yu EH, Eguchi S, Oshiro N, Yoshino K, Kikkawa U, Yonezawa K. J Biomed Sci. 2013 Apr 18;20:24. doi: 10.1186/1423-0127-20-24.
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Immuno-Biological Laboratories Co., Ltd. URL: http://www.ibl-japan.co.jp E-Mail: do-ibl@ibl-japan.co.jp