IBL *Data Sheet*

Code No. 28051

Anti-
BACE1 (42) Rabbit IgG Affinity Purify

Volume : 100 µg

BACE: β-site APP cleaving enzyme

Introduction : The current understanding of the role of amyloid in Alzheimer's disease (AD) has been established by a remarkable congruence of multiple disciplines: neuropathology, biochemistry, molecular biology, and epidemiological genetics. It is known that amyloidβ is derived, by two sequential cleavages, from the receptor-like amyloid precursor protein (APP). The proteases involved are beta-secretase, identified as the novel aspartyl protease BACE, and gamma-secretase, a multimeric complex containing the presenilins (PS-1, PS-2). BACE1 and BACE2 have been isolated as homologue of BACE, and this antibody reacts to BACE1.

Antigen : Synthetic peptide of a part of human BACE1 (RLPRETDEEPEEPGRR)

Purification : Purified with antigen peptide

Form : Lyophilized product from 1 % BSA in PBS containing 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 : The antibody can be used in immunocytochemistry. The optimal dilution is 1 - 5 µg/mL, however, the dilution rate should be optimized by each laboratories.
: The antibody can be used for western blotting at 1 - 5 µg/mL.

Specificity : Reacts with human, mouse and rat BACE1.

Reference :

1. Vassar R, Bennett BD, Babu-Khan S, Kahn S, Mendiaz EA, Denis P, Teplow DB, Ross S, Amarante P, Loeloff R, Luo Y, Fisher S, Fuller J, Edenson S, Lile J, Jarosinski MA, Biere AL, Curran E, Burgess T, Louis JC, Collins F, Treanor J, Rogers G, Citron M. Beta-secretase cleavage of Alzheimer's amyloid precursor protein by the transmembrane aspartic protease BACE. Science. 1999 Oct 22;286(5440):735-41.
2. Yan R, Bienkowski MJ, Shuck ME, Miao H, Tory MC, Pauley AM, Brashier JR, Stratman NC, Mathews WR, Buhl AE, Carter DB, Tomasselli AG, Parodi LA, Heinrikson RL, Gurney ME. Membrane-anchored aspartyl protease with Alzheimer's disease beta-secretase activity. Nature. 1999 Dec 2; 402 (6761): 533-7.