

Code No. 10151

Anti-Human

Presenilin-1 (17C2) Mouse IgG MoAb

Volume : 200 μg

Introduction

: Presenilin is a transmembrane protein which penetrates membranes several times and it mainly exists in endoplasmic reticulum.

Missense mutation of presenilin has been reported to link with familial Alzheimer's disease and to increase beta-Amyloid 42 in a transgenic mouse brain which

over-expressed mutated presenilin-1 and presenilin-2.

It has been also reported that presenilin act as  $\gamma$  secretase with other co-factor to cleave C-terminal of beta-Amyloid and associate with Notch function which has an

important role for cell differentiation.

Antigen: N-terminal fragment of recombinant Human Presentiin-1 (E. coli)

**Source**: Mouse-Mouse hybridoma

(X63 - Ag 8.653 x BALB/c mouse spleen cells, supernatant)

Clone : 17C2 Subclass :  $IgG_1$ 

Purification : Affinity purified with ProteinA

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, then its concentration comes to

200 μg/mL

Stability : Lyophilized product, 5 years at 2 - 8 °C

: Solution, 2 years at -20 °C

**Application**: This antibody can be stained in formalin fixed paraffin embedded tissues

after microwave treatment following formic acid treatment\*1 by

several Immunohistochemical techniques such as Avidin Bition Complex (ABC)

Method.

The optimal dilution is 10µg/mL, however, the dilution rate should be optimized by

each laboratories.

This antibody can be used for western blotting in concentration of 5µg/mL.

\*1 Rinsing by running water after formic acid treatment for 5 minutes following

de-paraffin.

Specificity: Human Presenilin-1 specific, non-cross react with Human Presenilin-2

Reference

: 1. Sherrington, R., et al. Cloning of gene bearing missense mutations in early-onset familial Alzheimer's disease. Nature, **375**: 754-760, 1995

2. Scheuner, D. et al. Secreted amyloid  $\beta$ -protein similar to that in the senile plaques of Alzheimer's disease is increased in vivo by the presenilin 1 and 2 and APP mutations linked to familial Alzheimer's disease. Nat. Med., **2**: 864-871, 1996

3. De Strooper, B., et al. Deficiency of presenilin-1 inhibits the normal cleavage of amyloid precursor protein. Nature, **391**: 387-390, 1998

4. De Strooper, B., et al. A presenilin-1-dependent gamma-secretase-like protease mediates release of Notch intracellular domain. Nature, **398**: 518-522, 1999