

Code No. 11088

## Anti-Human sAPPα (2B3) Mouse IgG MoAb

Volume : 100 µg

Introduction	:	Amyloid precursor protein (APP) is precursor protein of Amyloid $\beta$ which is major constituent of senile plaque in Alzheimer's disease. It is known that there are three major isoforms, APP695, APP751 and APP770, and are generated from alternative splicing of common precursor mRNA. Processing of APP occurs by two major pathways, non-amyloidogenic pathway and amyloidogenic pathway. The non-amyloidogenic pathway is mediated by $\alpha$ and $\gamma$ -secretases and gives rise to a large fragment known as soluble APP $\alpha$ (sAPP $\alpha$ ) and a small 3 kDa peptide known as p3. On the other hand, the Amyloidogenic pathway is mediated by $\beta$ - and $\gamma$ -secretases and yields soluble APP $\beta$ (sAPP $\beta$ ) and Amyloid $\beta$ . The physiologic function of APP itself is not clear, however, it is supposed that the function of APP in neuron system is different from that in other organ.
Antigen	:	Synthetic peptide of the C-terminal part of Human sAPP $\alpha$ (DAEFRHDSGYEVHHQK)
Source	:	Mouse-Mouse hybridoma (X63 – Ag 8.653 × BALB/c mouse spleen cells)
Clone	:	2B3 <b>Subclass</b> : IgG <sub>2b</sub>
Purification	:	Affinity purified with antigen peptide
Form	:	Lyophilized product from PBS containing 1 % BSA and 0.05 % $\rm NaN_3$
How to use	:	1.0 mL deionized water will be added to the product, then its concentration comes to 100 $\mu\text{g}/\text{mL}.$
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 2 - 5 $\mu$ g/mL. This antibody can be used for immuno-precipitation in concentration of 3 $\mu$ g /test.
Specificity	:	Not react with sAPP $\beta$ Not react with recombinant full-length APP by western blotting. Cross-reacts to mouse and rat
Reference	:	<ol> <li>Citron M, Oltersdorf T, Haass C, McConlogue L, Hung AY, Seubert P, Vigo-Pelfrey C, Lieberburg I, Selkoe DJ. Mutation of the beta-amyloid precursor protein in familial Alzheimer's disease increases beta-protein production. Nature. 1992 Dec 17;360(6405):672-4.</li> <li>Goate A, Chartier-Harlin MC, Mullan M, Brown J, Crawford F, Fidani L, Giuffra L, Haynes A, Irving N, James L, et al. Segregation of a missense mutation in the amyloid precursor protein gene with familial Alzheimer's disease. Nature. 1991 Feb 21;349(6311):704-6.</li> <li>Selkoe DJ. Normal and abnormal biology of the beta-amyloid precursor protein. Annu Rev Neurosci. 1994;17:489-517.</li> </ol>