

APP

Cat.No. 127-0P; control peptide, 100 µg peptide (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg peptide, lyophilized. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 756 to 770 from rat APP (UniProt Id: P08592)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	127 002, 127 003
Remarks	This control peptide consists of the synthetic peptide (GYENPTYKFFEQMQN) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of peptide needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Alzheimer's disease is characterized by the accumulation of β-amyloid peptides in plaques and vessel walls and by the intraneuronal accumulation of paired helical filaments composed of hyperphosphorylated tau.

Amyloid precursor protein APP is part of a super-family of transmembrane and secreted proteins. It appears to have a number of roles, including regulation of haemostasis and mediation of neuroprotection. APP also has metal and heparin-binding properties. Cleavage of amyloid precursor protein by β- and γ-secretases results in the generation of the Aβ (βA4)peptide, whereas α-secretase cleaves within the Aβ sequence and prevents formation from APP.

Recent findings indicate that the site of γ-secretase cleavage is critical to the development of amyloid deposits. Aβ1-42 is much more amyloidogenic than Aβ1-40. Aβ1-42 formation is favoured by mutations in the two presenilin genes (PS1 and PS2), and by the commonest amyloid precursor protein mutations.

Selected General References

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