



Anti-Amyloid β , Rabbit-Polyclonal Antibody

Catalog No. GB-10370 **Quantity:** 100 μ g
Antigen species: Amyloid β
Host species: Rabbit

Applications tested: ELISA
Reactivity: Amyloid β
Form: Peptide affinity purified antibody

Target description

The amyloid beta peptide (A beta) is the main component of amyloid deposits found in the brain of patients afflicted with Alzheimer's disease. Brain to blood transport is believed to be a major determinant of the amount of amyloid beta protein (AbetaP) found in brain. Chronic brain hypoperfusion (CBH) initiates spatial memory loss in aging rats thus mimicking human mild cognitive impairment (MCI) and also increases A beta in the hippocampus. The memory and amyloid changes are preceded by NO upregulation in the hippocampus. These preliminary findings may be important in understanding, at least in part, the molecular mechanisms that precede memory impairment during chronic brain ischemia and as such, the pre-clinical stage leading to Alzheimer's disease.

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide containing C-terminal domain of Amyloid.

Application

The antibody titer is more than 500K for ELISA. However, for the first testing, we recommend 1/3,000 dilution for ELISA, 1/1,000 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/50 dilution for immuno-histochemistry (IHC) staining on frozen cryosections, 1/30 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti-Amyloid β (1-42) (GB-10356)

ELISA Protocol

Amyloid (37-42) peptide is coated on EIA strips at 1 μ g per well. Add 300 μ l of blocking buffer and then wash wells with 0.2% PBST buffer. Antiserum or peptide specific purified antibody

GB-10370 is diluted in series as 10^2 ~ 10^5 folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 620 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined as >0.1 of ABS of antiserum minus pre-bleed serum.

Ab dilution	Purified-Ab
Blank	0.075
(-) 1 : 1000	0.062
1:8000	2.162
1:16000	1.699
1:32000	1.47
1:64000	1.002
1:128000	0.597
1 : 256000	0.409
1 : 512000	0.288
1 : 1024000	0.152
Titer	~976K

Storage

It is supplied as peptide affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (In PBS with 0.02% NaN₃). Store at 4 °C for short-term application. For long-term storage, aliquot and store at -20°C.

References

1. Shinozaki K, Konakahara T, Okuno H, Kodaka M. Analysis of fibril formation of amyloid-beta-protein by stretched exponential function. *Protein Pept Lett.* 10(6):569-74, 2003.
2. Cedazo-Minguez A, Popescu BO, Blanco-Millan JM, Akterin S, Pei JJ, Winblad B, Cowburn RF. Apolipoprotein E and beta-amyloid (1-42) regulation of glycogen synthase kinase-3beta. *J Neurochem.* 87(5):1152-64, 2003