

**Anti-Amyloid  $\beta$ -peptide (human)  
 Mouse monoclonal antibody**

PRODUCT NO.

**HYB 310-08**

 Subclass: IgG<sub>1</sub>/ $\kappa$ 

Clone: 12C3

PRESENTATION

Preparation: Protein-A/G purified

 Content: Available in 200  $\mu$ L and 1 mL volumes, 1 mg/mL

Solvent: 0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide

Storage: In the dark at 4-8°C

ANTIGEN

 Synthetic amyloid  $\beta$ -peptide (5-16): RHDSGYEVHHQK-NH<sub>2</sub> represents part of the larger amyloid  $\beta$ -peptide that precipitates as amyloid plaques in the brain of patients with Alzheimer's disease (1). The plaque-related peptides are 40-43 amino acid residues in length (2).

IMMUNOGEN

 Amyloid  $\beta$ -peptide (5-16) adsorbed onto aluminum hydroxide gel

SPECIFICITY

 The binding of HYB 310-08 to amyloid  $\beta$ -peptide depends on the presence of at least aminoacid residues 10-16.

EPITOPE SPECIFICITY

Epitope specificity differs from that of HYB 310-03 and HYB 310-07

REACTIVITY

 HYB 310-08 was tested by ELISA in wells coated with BSA-coupled synthetic peptides from the amyloid  $\beta$ -peptide.

 HYB 310-08 is suitable for immunoaffinity purification of amyloid  $\beta$ -peptide (4).

CULTURE MEDIUM

Dulbecco's modified Eagle's medium with 10% fetal calf serum

FUSION PARTNER

X63-Ag8.653

IMMUNIZATION

Female CF1 x BALB/c mice immunized by intraperitoneal injection

APPLICATION

Method	Usability	Dilution guideline	References
ELISA	Yes	1/10,000	
Immunoblotting	Not determined		
Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on use as detection antibody for BSA-coupled synthetic peptides from the amyloid  $\beta$ -peptide coated at 0.01-0.1  $\mu$ g/ml. Users should determine the optimal dilutions for their own purposes.

REFERENCES

- Walsh DM, Klyubin I, Fadeeva JV, Cullen WK, Anwyl R, Wolfe MS, Rowan MJ, Selkoe DJ (2002) Naturally secreted oligomers of amyloid beta protein potently inhibit hippocampal long-term potentiation in vivo. *Nature* 416:535-539.
- Abraham CR (2000) Amyloid beta peptide: a century of discoveries. *Amyloid* 7:7-9.
- Lewczuk P, Esselmann H, Meyer M, Wollscheid, Neumann M, Otto M, Maler JM, R  ther E, Kornhuber J, Wiltfang J (2003) The amyloid- $\beta$  (Ab) peptide pattern in cerebrospinal fluid in Alzheimer's disease: evidence of a novel carboxyterminally elongated Ab peptide. *Rapid Commun Mass Spectrom* 17:1291-1296.
- Sen JW, Bergen HR III, Heegaard NH (2003) On-line immunoaffinity-liquid chromatography-mass spectrometry for identification of amyloid disease markers in biological fluids. *Anal Chem* 75:1196-1202.

**CONDITIONS**

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.