COVANCE
THE DEVELOPMENT SERVICES COMPANY

Beta-Amyloid, 17-24 (4G8) Monoclonal Antibody (SIGNET) *Exclusively Provided by Covance*

Catalog Number: SIG-39200
Available Size: 0.2 mL, 0.5 mL, 1.0 mL

Description: Beta Amyloid (Aß) Monoclonal Antibody, 4G8
(Formerly Signet Catalog Nos.: 9200-02, 9200-05, 9200-10)

Covance is the Exclusive Provider of this Antibody Product

Intended Use: **Research Use Only (RUO)**

This product is sold for laboratory research use only, not for human or in-vivo use.

Clone: 4G8

Form: Ascites Fluid

Host: Mouse

IsoType: IgG2b

Species Reactivity: Human, Mouse

[Ab]: ~2 mg/mL

Specificity: This antibody is reactive to amino acid residues 17-24 of beta amyloid. The epitope lies within amino acids 18-22 of beta Amyloid (VFFAE). Beta amyloid forms are deposited in the CNS of patients with Alzheimer's disease and Down's syndrome. Signet's beta Amyloid antibody 4G8 reacts to the abnormally processed isoforms, as well as precursor forms.

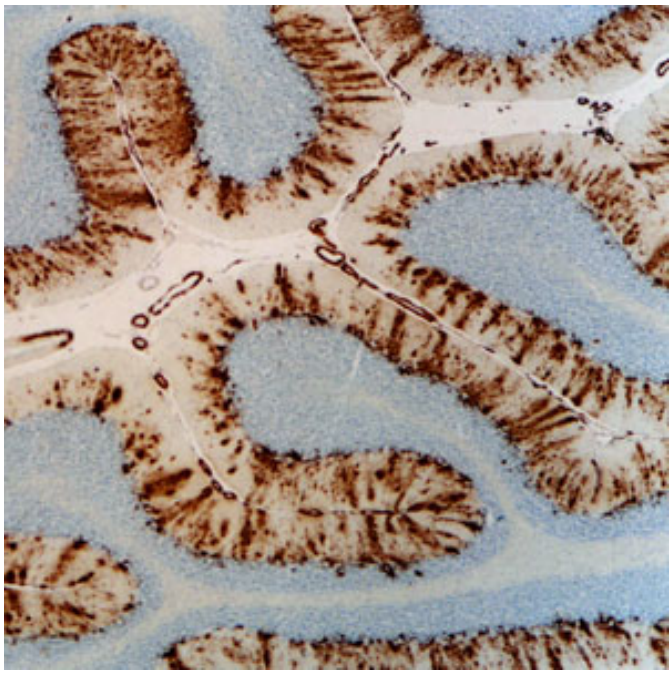

Image Description: Cerebellum stained with anti-Aß, clone 4G8 using Signet's USA™ ULTRA STREPTAVIDIN DETECTION [Cat No. SIG-32250].

Uses: This antibody is effective in immunoblotting, immunohistochemistry (IHC), immunoprecipitation (IP) immunoaffinity purifications and ELISA.

Suggested Working Dilution: The optimal working dilution should be determined for each specific assay condition.

- **IHC:** 1:100 - 1:1,000

Tissue Sections: Formalin-fixed human and animal paraffin-embedded brain sections
Pretreatment: Formic acid (70%) for 10-30 minutes at room temperature

- **ELISA:** 1:1,000 - 1:10,000

Storage: Store at -20°C or below. Upon initial thawing, apportion into working aliquots and store at -20°C or below. Avoid repeated freeze-thaw cycles to prevent denaturing the

antibody. Do not store in frost-free freezers.

References: Thakker DR, et al. Intracerebroventricular amyloid-beta antibodies reduce cerebral amyloid angiopathy and associated micro-hemorrhages in aged Tg2576 mice. *Proc Natl Acad Sci USA Feb 25*, 2009.

Kimura N, et al. Age-related changes of intracellular Abeta in cynomolgus monkey brains. *Neuropath Appl Neurobiol 31(2)*:170-80, 2005.

Klyubin I, et al. Amyloid beta protein immunotherapy neutralizes Abeta oligomers that disrupt synaptic plasticity in vivo. *Nat Med 11(5)*:556-61, 2005.

Iijima K, et al. Dissecting pathological effects of human Abeta40 and Abeta42 in Drosophila: a potential model for Alzheimer's disease. *PNAS 101(17)*:6623-6628, 2004.

Li M, et al. Macrophage colony stimulatory factor and interferon-gamma trigger distinct mechanisms for augmentation of beta-amyloid-induced microgliamediated neurotoxicity. *J Neurochem 91*:623-33, 2004.

Poduloso JF, et al. Design and chemical synthesis of a magneticresonance contrast agent with enhanced in vitro binding, high blood-brain barrier permeability, and in vivo targeting to Alzheimer's disease amyloid plaques. *Biochem 43*:6064-6075, 2004.

Venezia V, et al. Apoptotic cell death influences the signaling activityof the amyloid precursor protein through SchA and Grb2 adaptor proteins inneuroblastoma SH-SY5Y cells. *J Neurochem 90*:1359-1370, 2004.

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Related Products:

- Beta-Amyloid, 17-24 (4G8) Monoclonal Antibody, Purified (SIGNET) *Exclusively Provided by Covance*
  Catalog Number SIG-39220

Product Revision Date: 9/11/2009