

Product datasheet for AM00003PU-N

OriGene Technologies, Inc.

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Amyloid beta (1-42 specific) Mouse Monoclonal Antibody [Clone ID: 8G7]

Product data:

Product Type: Primary Antibodies

Clone Name: 8G7

Applications: ELISA, IF, WB

Recommended Dilution: ELISA: 0.05 μg/ml.

Immunoblotting: 1.0 μg/ml for HRPO/ECL detection.

Recommended buffer: Casein/Tween20 based blocking and blot incubation buffer.

Immunocytochemistry: 0.1-1 µg/ml.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: C-terminal peptide (aa 1-42) of Amyloid beta A4 - conjugated to KLH

Specificity: This antibody specifically interacts with the C-Terminus of beta-Amyloid (1-42) and does not

crossreact with beta-Amyloid (1-40).

Formulation: 1ml 2 x PBS/0.09% Sodium Azide/PEG and Sucrose

State: Purified

State: Lyophilized purified IgG fraction

Reconstitution Method: Restore with 1.0 ml H2O (15 min, RT).

Purification: Subsequent Thiophilic Adsorption and Size Exclusion Chromatography

Conjugation: Unconjugated

Storage: For long-term storage, freeze lyophilizate upon arrival (-20°C).

Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted antibody can be

stored frozen at -20°C to -80°C up to 1 year. Thaw aliquots at 37°C.

Thawed aliquots may be stored at 2-8°C up to 3 months.

Avoid repeated freeze-thaw cycles.





Background:

The beta-amyloid peptide (beta A4), proteolytically released from the amyloid precursor protein (APP), is the principal component of senile plaques in Alzheimer's disease. Cleavage of APP by alpha-secretase or alternatively by beta-secretase leads to generation and extracellular release of soluble APP peptides, S-APP-alpha and S-APP-beta, respectively, and the retention of corresponding membrane-anchored C-terminal fragments, C83 and C99. Subsequent processing of C83 by gamma-secretase yields P3 peptides. This is the major secretory pathway and is nonamyloidogenic. Alternatively, presenilin/nicastrin-mediated gamma-secretase processing of C99 releases the amyloid beta proteins, amyloid-beta 40 (Abeta40) and amyloid-beta 42 (Abeta42), major components of amyloid plaques, and the cytotoxic C-terminal fragments, gamma-CTF(50), gamma-CTF(57) and gamma-CTF(59).

Product images:



Figure 1. Immunoblot Analysis Amyloid beta A4 peptides: Lane 1: bA4 (1-40), Lane 2: bA4 (1-42), Lane 3: bA4 (1-43) were applied on SDS-PAGE and transferred to a PVDF membrane. The Immunoblot was probed with 2 g/ml mab bA4 (42)-8G7for 1h at 15-22C and develo