

AM00001PU-N**Monoclonal Antibody to Amyloid beta (1-40 specific) - Purified**

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| Alternate names: | Amyloid beta peptide |
| Quantity: | 0.1 mg |
| 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). |
| Host / Isotype: | Mouse / IgG1 |
| Recommended Isotype Controls: | SM10P (for use in human samples), AM03095PU-N |
| Clone: | 5C3 |
| Immunogen: | C-terminal peptide (aa 1-40) of Amyloid beta A4 - conjugated to KLH |
| Format: | State: Lyophilized purified IgG fraction Purification: Subsequent Thiophilic Adsorption and Size Exclusion Chromatography Buffer System: 1 ml 2 x PBS/0.09% Sodium Azide/PEG and Sucrose Reconstitution: Restore with 1 ml H2O (15 min, RT). |
| Applications: | ELISA: 0.1 µg/ml. Immunoblotting: 1.0 µg/ml for HRPO/ECL detection. Recommended buffer: Casein/Tween20 based blocking and blot incubation buffer. Immunocytochemistry: 1-10 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user. |
| Specificity: | This antibody specifically interacts with the C-Terminus of beta-Amyloid (1-40) and does not crossreact with beta-Amyloid (1-42). Species: Human. Other species not tested. |
| 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. |

Pictures:

Immunoblot Analysis: Amyloid beta A4 peptides were applied on SDS-PAGE and transferred to a PVDF membrane. The Immunoblot was probed with 2 µg/ml mab bA4 (40)-5C3 for 1h at 15-22°C and developed by ECL (exposure time: 30 sec). Lane 1: bA4 (1-40), Lane 2: bA4 (1-42), Lane 3: bA4 (1-43)

