

Mouse Monoclonal Antibody to

Amyloid β A4, N-Terminus

clone 19H5

Order No.: 0064-100/bA4N-19H5

Size (μ g) 100

Lot No.: 0064S



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02/020307F

Isotype	Species	Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG1, kappa	human		ELISA, WB		none	N-Terminus of Amyloid β A4; crossreacts with APP	N-terminal peptide conjugated to KLH

Background and Specificity:

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).

Mab β A4N-19H5 recognizes the free N-Terminus of the β A4 polypeptide. The antibody crossreacts with APP.

Related Products

mab to β A4, N-Terminus
#0084-100/bA4N-19H11

mab to β A4, N-Terminus
#0195-100/bA4N-7F4

mab to β A4, N-Terminus
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3

mab to β A4 (1-40), C-Terminus
#0060-100/bA4(40)-5C3

mab to β A4 (1-40/42), C-Terminus
#0062-100/bA4(40/42)-9F1

mab to β A4 (1-42), C-Terminus
#0061-100/bA4(42)-8G7

mab to β A4 (1-43), C-Terminus
#0095-100/bA4(43)-6G12

Purification:	The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.
Formulation:	lyophilized from 1 ml 2 x PBS / 0.1 % Na-azide / PEG and Sucrose.
Reconstitution:	Reconstitute with 1 ml H ₂ O (15 min, RT).
Stability:	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 -80°C up to 1 year. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months.
	Avoid repeated freeze / thaw cycles.
Positive Control:	none
Immunoblotting:	1 μ g/ml for HRPO/ECL detection Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product #3031-500/CPPT or #3031-3000/CPPT
Immunoprecipitation:	ND
Immunocytochemistry:	ND
ELISA:	use at 0.05 μ g/ml

1 2 3



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 μ g/ml mab bA4N-19H5 for 1h at 15-22°C and developed by ECL (exposure time: 30 sec).

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