

## Mouse Monoclonal Antibody to

# Amyloid $\beta$ A4 (1-40), C-Terminus

## clone 5C3

**Order No.:** 0060-100/bA4(40)-5C3

**Size ( $\mu$ g)** 100

**Lot No.:** 0060S



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Isotype	Species	Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG1	human		ELISA, WB, ICC		none	C-Terminus of Amyloid $\beta$ A4 (1-40), does not crossreact with $\beta$ A4 (1-42)	C-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  $\beta$ A4(40)-5C3** specifically interacts with the C-Terminus of  $\beta$ -Amyloid (1 - 40) and does not crossreact with  $\beta$ -Amyloid (1 - 42).

### Related Products

**mab to  $\beta$ A4, N-Terminus**  
#0064-100/bA4N-19H5

**mab to  $\beta$ A4, N-Terminus**  
#0084-100/bA4N-19H11

**mab to  $\beta$ A4, N-Terminus**  
#0195-100/bA4N-7F4

**mab to  $\beta$ A4, N-Terminus**  
#0196-100/bA4N-7F9

**mab to  $\beta$ A4, N-Terminus**  
#0197-100/bA4N-11H3

**mab to  $\beta$ A4 (1-40/42), C-Terminus**  
#0062-100/bA4(40/42)-9F1

**mab to  $\beta$ A4 (1-42), C-Terminus**  
#0061-100/bA4(42)-8G7

**mab to  $\beta$ A4 (1-43), C-Terminus**  
#0095-100/bA4(43)-6G12

<b>Purification:</b>	The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.
<b>Formulation:</b>	lyophilized from 1 ml 2 x PBS / 0.09% Na-azide / PEG and Sucrose.
<b>Reconstitution:</b>	Reconstitute with 1 ml H <sub>2</sub> O (15 min, RT).
<b>Stability:</b>	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.
	<b>Avoid repeated freeze / thaw cycles.</b>
<b>Positive Control:</b>	none
<b>Immunoblotting:</b>	1 $\mu$ g/ml for HRPO/ECL detection <b>Recommended blocking buffer:</b> Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product #3031-500/CPPT or #3031-3000/CPPT.
<b>Immunoprecipitation:</b>	ND
<b>Immunocytochemistry:</b>	use at 1 - 10 $\mu$ g/ml
<b>ELISA:</b>	use at 0.1 $\mu$ 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 $\mu$ g/ml mab bA4(40)-5C3 for 1h at 15-22°C and developed by ECL (exposure time: 30 sec).

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