

## Mouse Monoclonal Antibody to

# Amyloid $\beta$ A4 (1-43), C-Terminus

## clone 6G12

**Order No.:** 0095-100/bA4(43)-6G12

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

**Lot No.:** 0095S



02/020307F

Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG1	human	ELISA, WB		none	C-Terminus of Amyloid bA4 (1-43)	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 bA4(43)-6G12** specifically interacts with the C-Terminus of b-Amyloid (1 - 43) and does not crossreact with b-Amyloid (1 - 40) or (1-42), respectively.

### 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), C-Terminus**  
#0060-100/bA4(40)-5C3

**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

<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 / 0.1 % 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>	ND
<b>ELISA:</b>	use at 0.05 $\mu$ 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(43)-6G12 for 1h at 15-22°C and developed by ECL (exposure time: 30 sec).

**All products are supplied for research and investigational use only. Not for use in humans or laboratory animals.**