

## **Product datasheet**

# Conformation-Specific Amyloid beta Antibody Sampler Panel ab218719

Recombinant

11 Images

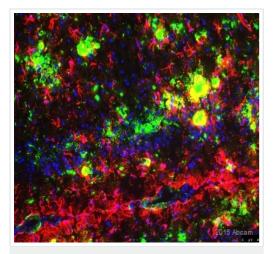
Overview			
Product name	Conformation-Specific Amyloid beta Antibody Sampler Panel		
Product overview	Amyloid beta (Aß) plaques exhibit diverse conformations resulting in structural variants with distinct pathologies. Conformation-specific Aß antibody sampler panel (ab218719), includes recombinant rabbit monoclonal antibodies against fibrils of Aß 1-42 that can distinguish conformation variation in amyloid structures. It also contains a goat anti-rabbit (HRP) secondary antibody.		
	The antibodies in this panel have been validated using both Dot blot staining on paraffin-embedded human and mouse model samples.	and immunohistochemistry	
Notes	<b>Explore our range of antibody sample panels</b> designed to provide you with a variety of trial- size antibodies in a convenient and cost-effective format.		
	<u><b>Carrier-free formulations</b></u> of our recombinant antibodies are availa multiplex IHC analysis including Imaging Mass Cytometry <sup>TM</sup> . Please products' section below.	-	
Properties			
Storage instructions	Store at -20°C. Please refer to protocols.		
Components		1 packs	
ab205342 - Anti-Amyloid Fibril antibody [mOC116] - Conformation-Specific		1 x 10µl	
ab205339 - Anti-Amyloid Fibril antibody [mOC22] - Conformation-Specific		1 x 10µl	
ab205341 - Anti-Amyloid Fibril antibody [mOC78] - Conformation-Specific			
ab201062 - Anti-Amyloid Fibril antibody [mOC87] - Conformation-Specific			
ab205340 - Anti-beta Amyloid 1-42 antibody [mOC23] - Conformation-Specific 1 x 10			

Components	1 packs
ab201059 - Anti-Vascular Amyloid 1-42 [mOC31] - Conformation-Specific	1 x 10µl
ab201060 - Anti-beta Amyloid 1-42 antibody [mOC64] - Conformation-Specific	1 x 10µl
ab201061 - Anti-beta Amyloid 1-42 antibody [mOC98] - Conformation-Specific	1 x 10µl
ab205718 - Goat Anti-Rabbit IgG H+L (HRP)	1 x 100µg

#### **Cellular localization**

beta Amyloid: Membrane. Membrane > clathrin-coated pit. Cell surface protein that rapidly becomes internalized via clathrin-coated pits. During maturation, the immature APP (N-glycosylated in the endoplasmic reticulum) moves to the Golgi complex where complete maturation occurs (O-glycosylated and sulfated). After alpha-secretase cleavage, soluble APP is released into the extracellular space and the C-terminal is internalized to endosomes and lysosomes. Some APP accumulates in secretory transport vesicles leaving the late Golgi compartment and returns to the cell surface. Gamma-CTF(59) peptide is located to both the cytoplasm and nuclei of neurons. It can be translocated to the nucleus through association with APBB1 (Fe65). Beta-APP42 associates with FRPL1 at the cell surface and the complex is then rapidly internalized. APP sorts to the basolateral surface in epithelial cells. During neuronal differentiation, the Thr-743 phosphorylated form is located mainly in growth cones, moderately in neurites and sparingly in the cell body. Casein kinase phosphorylation can occur either at the cell surface or within a post-Golgi compartment. Amyloid Fibril: Membrane.

#### Images

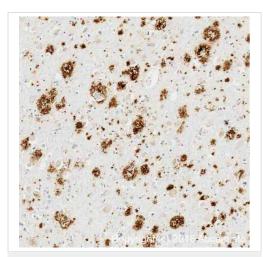


Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-Amyloid Fibril antibody [mOC87] -Conformation-Specific ( <u>ab201062</u>

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Immunohistochemical analysis of 4% PFA in 0.1M PBS perfusionfixed murine APP-PS1 transgenic brain tissue sections, labelling beta amyloid with **ab201062** at a dilution of 1/200 incubated for 24 hours at 4°C in 0.1 M PBST with 10% donkey serum. Permeabilization was 0.1M PBS with 3% Triton X. Secondary was a polyclonal rabbit Alexa Fluor<sup>®</sup> 488 at 1/100. Counterstaining was DAPI against nuclear DNA and astrocytes stained with GFAP-Cy3.

#### See Abreview



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Amyloid Fibril antibody [mOC116] - Conformation-Specific (

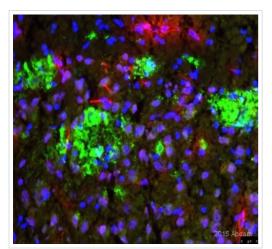
ab205342

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IHC image Amyloid Fibrillin staining in Human Brain Alzheimer formalin fixed paraffin embedded tissue section\*, performed on a Leica Bond<sup>™</sup> system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with <u>ab205342</u>, 0.1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

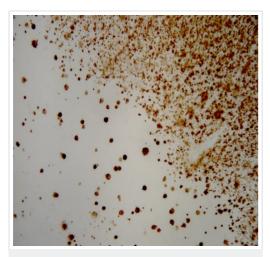


Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-beta Amyloid 1-42 antibody [mOC98] - Conformation-Specific ( <u>ab201061</u>

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Immunohistochemical anaylsis of 4% PFA in 0.1M PBS perfused frozen murine APP-PS1 transgenic brain tissue, labelling beta amyloid with **ab201061** at a diution of 1/200 incubated for 24 hours at 4°C in 0.1 M PBST with 10% donkey serum. Permeabilization 0.1 M with 3% Triton X. Blocking was with 10% serum at 24°C for 1 hour. The secondary used was a Rabbit polyclonal Alexa Fluor<sup>®</sup> 488 conjugate at 1/1000. Counterstain was DAPI against nuclear DNA. The antibody labelled amyloid plaques and colocalised with neuronal marker NeuN (red) only in uneffected neurons.

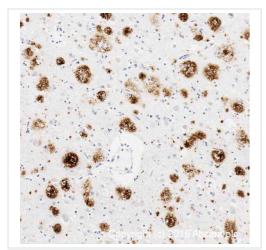
See Abreview



Immunohistochemistry - Free Floating - Anti-Amyloid Fibril antibody [mOC87] - Conformation-Specific (

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<u>ab201062</u>
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Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Amyloid Fibril antibody [mOC78] - Conformation-Specific (

<u>ab205341</u>

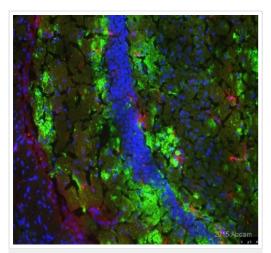
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Immunohistochemical staining of human brain tissue from a patient with a diagnosis of Alzheimers disease, male, 81 years, 5 hour post mortem index, tangle stage 5, plaque stage B, mini mental status exam score 12. Sections were cut using a vibratome. No antigen retrieval was performed. Free floating sections were stained using **ab201062** at a dilution of 50 ng/mL. The secondary antibody used was a biotinylated goat anti-rabbit at a dilution of 1/225, which was blocked with normal goat serum. The sample was visualized using ABC solution (1 hour incubation) followed by 1-4 minutes of DAB. The sample was mounted and allowed to dry overnight, followed by dehydration in increasingly concentrated ethanol solutions.

IHC image of Amyloid Fibrillin staining in Human Brain Alzheimer formalin fixed paraffin embedded tissue section\*, performed on a Leica Bond<sup>™</sup> system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with **ab205341**, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

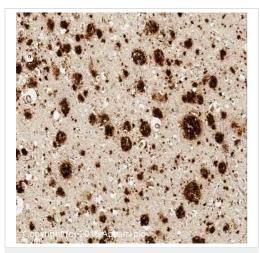
\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Immunohistochemical analysis of 4% PFA in 0.1M PBS perfusion fixed murine APP-PS1 transgenic brain tissue sections, labelling beta amyloid with <u>ab201060</u> at a dilution of 1/200 incubated for 24 hours at 4°C in 0.1 PBST with 10% donkey serum. Permeabilization was with 0.1 M PBS with 3% Triton X. Blocking with 10% serum for 1 hour at 24°C. Rabbit anti-mouse polyclonal Alexa Fluor<sup>®</sup> 488 undiluted. Counterstaining was with DAPI against nuclear DNA and an ApoE counterstain in red.

#### See Abreview

Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-beta Amyloid 1-42 antibody [mOC64] - Conformation-Specific ( <u>ab201060</u>



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-beta Amyloid 1-42 antibody [mOC64] - Conformation-Specific (

<u>ab201060</u>

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IHC image of beta Amyloid staining in Human Brain Alzheimer formalin fixed paraffin embedded tissue section\*, performed on a Leica Bond<sup>™</sup> system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with **ab201060**, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

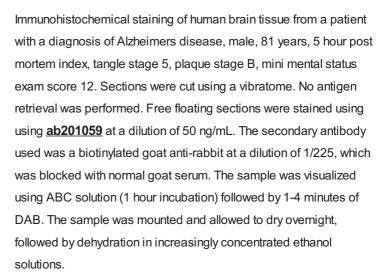
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

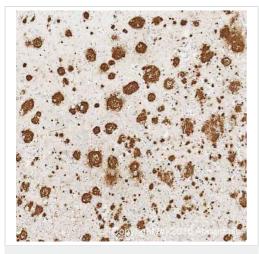
\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Immunohistochemistry - Free Floating - Anti-beta Amyloid 1-42 antibody [mOC31] - Conformation-Specific (

<u>ab201059</u>	
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Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-beta Amyloid 1-42 antibody [mOC23] - Conformation-Specific (

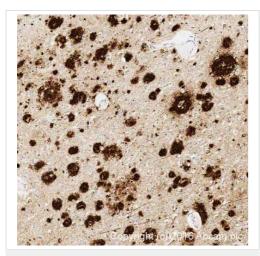
ab205340

IHC image of beta Amyloid staining in Human Brain Alzheimer formalin fixed paraffin embedded tissue section\*, performed on a Leica Bond<sup>™</sup> system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with <u>ab205340</u>, 0.1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

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Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Amyloid Fibril antibody [mOC22] - Conformation-Specific (

<u>ab205339</u>

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IHC image of Amyloid Fibril staining in Human Brain Alzheimer formalin fixed paraffin embedded tissue section\*, performed on a Leica Bond<sup>™</sup> system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with **ab205339**, 0.1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

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