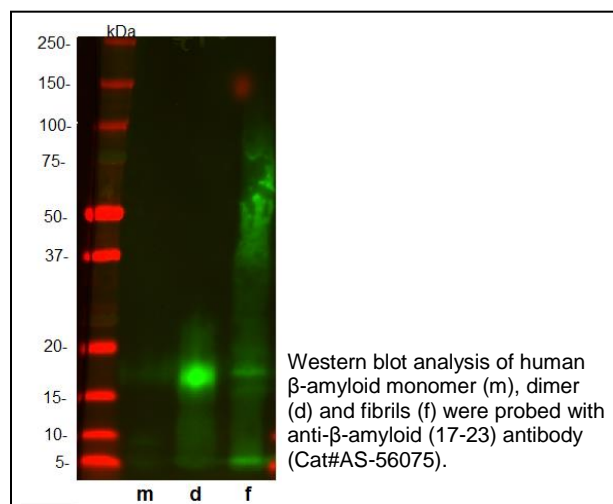


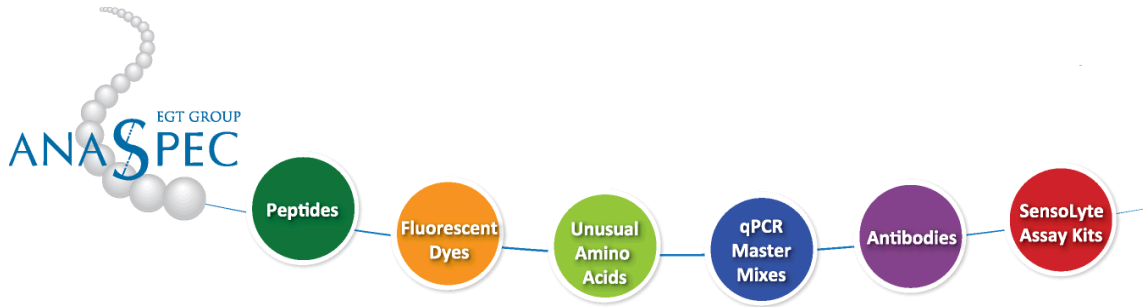


Update: September, 2017

## Product Data Sheet

<b>Product Name:</b>	Anti- $\beta$ -amyloid (17-23), human <i>Rabbit Polyclonal Antibody</i>
<b>Catalog Number:</b>	AS-56075
<b>Lot Number:</b>	See label on vial
<b>Storage Buffer:</b>	1X PBS (pH 7.4) containing 0.05% sodium azide and < 0.1% BSA
<b>Size:</b>	50 $\mu$ g
<b>Concentration:</b>	0.2 mg/mL
<b>Immunogen:</b>	KLH conjugated with synthetic peptide corresponding to 17-23 amino acids of human $\beta$ -amyloid.
<b>Species Reactivity:</b>	This antibody recognizes human $\beta$ -amyloid monomers, oligomers, and fibrils (minimal cross-reactivity with monomers). The antibody was evaluated for specificity by Western blot.
<b>Application Notes:</b>	The following concentration ranges are recommended starting points for this product. Optimal working concentrations should be determined by the investigator for specific applications.
	Western blot: 0.5-2.0 $\mu$ g/mL
	Immunohistochemistry*: 5.0-10.0 $\mu$ g/mL
	(* Recommended but not yet tested)





**Background:**

Alzheimer's disease (AD) is the most common neurodegenerative disorder in elderly people. It has been demonstrated that AD has biological causes and is characterized by the presence of senile plaques and neurofibrillary tangles mainly in cerebral cortex and hippocampus brain regions.<sup>1-5</sup> Beta-amyloid 1-40 (A $\beta$ 40) and beta-amyloid 1-42 (A $\beta$ 42) are the main components of the above plaques; however, other forms of beta-amyloid peptides are also present. Both A $\beta$ 40 and A $\beta$ 42 peptides are cleaved from the amyloid precursor protein (APP) by  $\alpha$ -secretase,  $\beta$ -secretase, and  $\gamma$ -secretase enzymes.<sup>2,3,5</sup> Many studies suggest that A $\beta$ 42 or/and A $\beta$ 43 are required to initiate formation of amyloid plaques and neurofibrils that leads to neurodegeneration.<sup>1-5</sup>

**Storage:**

Store at 4°C for 1-2 weeks. Aliquot and store at -20°C up to 1 year. Avoid freeze and thaw cycle.

**References:**

1. Levites, Y. et al. *J Clin Invest* **116**, 193 (2006).
2. Broersen, K. et al. *Alzheimer's Res Ther* **2**, 1 (2010).
3. Zhang, Y-W. et al. *Mol Brain* **4**, 1 (2011).
4. Koechling T. et al. *Int J Alzheimer's Dis*, (2010).
5. Bobba A. et al. *Int J Alzheimer's Dis* (2010).

This product is for *in vitro* research use only.