

Datasheet for 000-001-L20**Beta Amyloid pyrE 11-42 Peptide****Overview**

Description:	Beta Amyloid pyrE 11-42 Peptide - 000-001-L20
Item No.:	000-001-L20
Size:	1 mg
Applications:	ELISA

Product Details

Background:	Amyloid peptides, derived from amyloid precursor protein (APP), are thought to play a role in the development of the senile plaques associated with Alzheimer's disease. The amyloid hypothesis presupposes that flaws in the processing of APP result in abnormally high levels of the longer, "stickier" forms of beta amyloid, known as A β 42 and A β 43, leading to aggregation of amyloid in the neuronal cell death and ultimately neuronal death. Mutations in the structure of A β 40 and related peptides as well as in some of the enzymes involved in the processing of APP have been shown to alter the processing of APP. The sporadic (i.e., non-genetic) form of the disease, however, is far more common, caused by aging in concert with a number of both genetic and environmental risk factors.
Synonyms:	ABPP, APP1, Alzheimer disease amyloid protein, Cerebral vascular amyloid peptide, Protease nexin-II, control peptide, blocking peptide
Type:	Peptide

Target Details

Purity/Specificity:	Greater than 95% specific peptide.
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Application Details

Suggested Applications:	ELISA (Based on references)
Application Note:	Beta Amyloid pyrE 11-42 Control Peptide is suitable for use in ELISA, Western Blot, Dot blot, PCA, and other assays. Control peptide should be used at 1.0 μ g per 1.0 μ l of antiserum in per assay. Specific conditions for reactivity should be optimized by the end user.

Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Control peptide should be used at 1.0 µg per 1.0 µl of antiserum per assay.

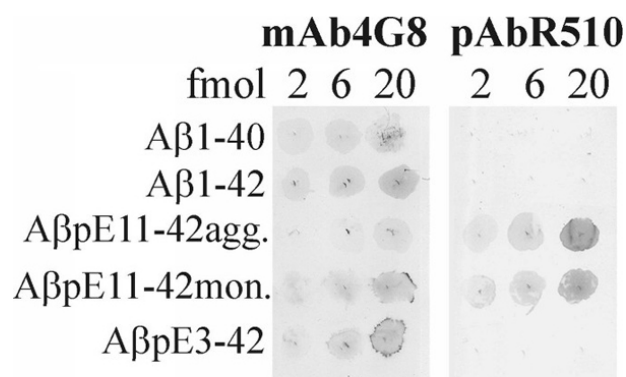
Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by dry weight
Buffer:	None
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 2 - 8 ° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Dot Blot

The reactivity of the rabbit polyclonal affinity purified antibody R510 (pAbR510) with synthetic Aβ-pE11 and other Aβ peptides tested by dot blotting. The intensities of the antibody reactions with Aβ-pE11 peptide were proportional to the amounts of the peptide in the 2–20 fmol range. There was no reaction with Aβ1–40, Aβ1–42 and AβpE3–42. The pAbR510 reacted similarly with oligomerized Aβ-pE11 peptide (AβpE11–42agg.) and the peptide freshly diluted from HFIP stock solution (AβpE3–42mon.). Oligomerization of the peptide reduced its reaction with the reference antibody (mAb4G8). Fig8. PMID: 32345355.

References

- Frackowiak J et al. Enhanced accumulation of N-terminally truncated A β with and without pyroglutamate-11 modification in parvalbumin-expressing GABAergic neurons in idiopathic and dup15q11.2-q13 autism. *Acta Neuropathologica Communications* (2020)

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