

Datasheet for 600-401-J14**Beta Amyloid pyro E3 Antibody****Overview**

Description:	Anti-Beta Amyloid pyro E3 (RABBIT) Antibody - 600-401-J14
Item No.:	600-401-J14
Size:	50 µg
Applications:	Dot Blot, ELISA, IF, Multiplex, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	The cerebral and vascular plaques associated with Alzheimer's disease are mainly composed of Amyloid beta peptides. Beta Amyloid is derived from cleavage of the Amyloid precursor protein and varies in length from 39 to 43 amino acids. Beta Amyloid [1-40], beta Amyloid [1-42], and beta Amyloid [1-43] peptides result from cleavage of Amyloid precursor protein after residues 40, 42, and 43, respectively. The cleavage takes place by gamma-secretase during the last Amyloid precursor protein processing step. Beta Amyloid [1-40], beta Amyloid [1-42], and beta Amyloid [1-43] peptides are major constituents of the plaques and tangles that occur in Alzheimer's disease. Beta Amyloid antibodies and peptides have been developed as tools for elucidating the biology of Alzheimer's disease. Anti-beta Amyloid [Pyro Glu11] Antibody is ideal for researchers interested in Alzheimer's Research, Cell Cycle and Replication, and Neuroscience research.
Synonyms:	rabbit anti-Beta Amyloid pyro E3 Antibody, β -amyloid pyro E3, Alzheimer disease amyloid protein, Beta amyloid, A-beta, ABPP, APPI
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	APP
Reactivity:	Human

PTM Specificity:	Pyroglutamate
Immunogen Type:	Conjugated Peptide
Immunogen:	Beta Amyloid [Pyro Glu3] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the N-terminus 3-pyro E start point of human beta Amyloid.
Purity/Specificity:	Anti-Beta Amyloid pyro Glu3 was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody contains no reactivity towards the 1-42 ABeta peptide. A BLAST analysis was used to suggest cross-reactivity with Human, Primate, Bovine and Sheep based on 100% sequence homology. It is not reactive with Rodentia. Cross-reactivity with beta Amyloid pyro Glu3 from other sources has not been determined.
Relevant Links:	• UniProtKB - P05067 • NCBI - NP_000475.1 • GeneID - 351

Application Details

Tested Applications:	Dot Blot, ELISA, IF, Multiplex, WB
Application Note:	Anti-Beta Amyloid pyro Glu3 has been tested in dot blot, ELISA, Western Blot, and Immunostaining. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~86.9kDa corresponding to the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:60,000
IF:	1:100-1:500
IHC:	1:100-1:500
WB:	1 µg/ml

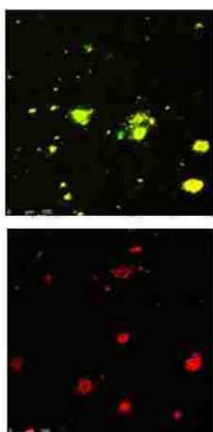
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

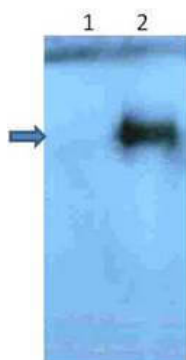
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



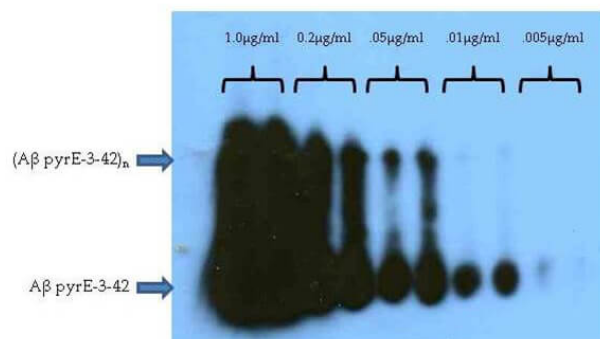
Immunofluorescence Microscopy

Immunofluorescence Microscopy of Rabbit Anti-beta Amyloid pyro E3 antibody. Tissue: human brain section. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: beta Amyloid pyro E3 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: beta Amyloid pyro E3 is nuclear and cytoplasmic. Staining: Top: β Amyloid pyro E3 as green fluorescent signal, β Amyloid 3 as yellow signal; and Bottom: β Amyloid 3 as red signal with co-incubation of β Amyloid pyro E3 peptide.



Western Blot

Western Blot of Rabbit Anti-beta Amyloid pyro E3 antibody. Lane 1: beta Amyloid 3 peptide Lane 2: beta Amyloid pyro E3 peptide. Load: 1 µg per lane. Primary antibody: β Amyloid pyro E3 antibody at 2µg/mL for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 86.9 kDa for beta Amyloid pyro E3 peptide.



Western Blot

Western Blot of Rabbit Anti-beta Amyloid pyro E3 antibody. Lane 1-10: beta Amyloid pyro E3 peptide. Load: 1 μg per lane 1-2, 0.2 μg per lane 3-4, 0.05 μg per lane 5-6, 0.01 μg per lane 7-8, 0.005 μg per lane 9-10. Primary antibody: β Amyloid pyro E3 antibody at 0.5 μg/mL for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 86.9 kDa for beta Amyloid pyro E3 peptide. Cross reactivity with β Amyloid 3 peptide is >1000 fold below pyrE3 reactivity and contains no reactivity towards the β Amyloid 42 Aβ peptide (data not shown).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.