# Certificate of Analysis BACE1 (β-Secretase) FRET Assay Kit, Red , 1 Kit



Part Number: P2985 Lot Number: 1775474 Immediate Storage: -80°C Shipping Conditions: dry ice 5791 Van Allen Way Carlsbad, CA 92008 Phone: 760.603.7200 Fax: 760.602.6500 www.lifetechnologies.com

## Components:

Description	Composition	Quantity	Part Number	Lot Number
BACE1 (β-Secretase), Recombinant Human	50 mM Tris (pH 7.5) and 10% Glycerol.	5 Units	P2947*	1681145B
BACE1 Substrate	75 µM, Rh-EVNLDAEFK-Quencher, in 50 mM ammonium bicarbonate.	45 µL	P2986	1719671B
BACE1 Assay Buffer	50 mM sodium acetate (pH 4.5) + proprietary reagents.	20 mL	P2988	1434742G
BACE1 Stop Solution	2.5 M sodium acetate	5 mL	P2987	1763231A
BACE1 Product Standard	25 μM, Rh-EVNL in 50 mM ammonium bicarbonate	25 µL	P2989	1766744A

<sup>\*</sup>See individual COA

Storage and Handling: The performance of this product is guaranteed for 6 months from the date of purchase if stored and handled properly.

Description	Storage and Handling	
BACE1 (β-Secretase), Recombinant Human	Store at -80°C. AVOID MULTIPLE FREEZE-THAW CYCLES.	
BACE1 Substrate	Thaw when needed and refreeze at -20°C. Avoid subjecting these reagents to repeated freeze/thaw cycles. Vortex prior to use.	
BACE1 Assay Buffer	Thaw upon receipt. Store at room temperature. Mix before use.	
BACE1 Stop Solution	Thaw upon receipt. Store at room temperature.	
BACE1 Product Standard	Thaw when needed and refreeze at -20°C. Avoid subjecting these reagents to repeated freeze/thaw cycles. Vortex prior to use.	

## **Functional Testing:**

Kit components are functionally tested for performance in the assay.

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## Certificate of Analysis BACE1 (β-Secretase), Recombinant Human, 5 Units



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> kDa 220

#### Description:

BACE1 (β-Secretase), Recombinant Human from a cDNA sequence encoding amino acids 1-460 of human BACE1, corresponding to the ectodomain. Expressed in baculovirus infected insect cells. Purified BACE1(P2947) exists as the proBACE1 form having an apparent molecular weight of 55 kDa and an N–terminal sequence of TQHGIRLPLR.

Active Enzyme Concentration: 129.1 Units/mL.

## Specific Activity:

1076 Units/mg. One unit is defined as the amount of BACE1 required to cleave one pmol of Rhodamine-EVNLDAEFK-Quencher in one minute at room temperature. Cleavage of the FRET peptide is monitored by an increase in fluorescence (Ex535 nm/ Em590 nm) in the following assay reaction: 250 nM Rhodamine-EVNLDAEFK-Quencher in 50 mM Sodium Acetate (pH 4.5) in a total volume of 30  $\mu L$  accoding to the BACE1 ( $\beta$ -Secretase) FRET Assay Kit, Red (P2985).

#### Concentration:

 $0.17\ mg/mL$  total protein as measured using the Bradford protein assay with BSA as a standard.

#### Storage and Handling:

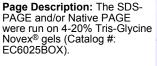
Store at -80°C. AVOID MULTIPLE FREEZE-THAW CYCLES.

### Storage Buffer:

50 mM Tris (pH 7.5) and 10% Glycerol.

### **QUALITY ASSURANCE**

## Gel Information for BACE1 (β-Secretase), Recombinant Human



Lane 1: Invitrogen™ BenchMark™ Protein Ladder (Catalog #: 10747-012).

**Lane** 2: 0.4 μg BACE1 (β-Secretase), Recombinant Human

**Lane** 3: 0.8 μg BACE1 (β-Secretase), Recombinant Human

**Lane** 4: 2 μg BACE1 (β-Secretase), Recombinant Human

Lane 5: 4  $\mu g$  BACE1 ( $\beta$ -Secretase), Recombinant Human

## Purity:

≥ 90%

## Purity:

90% as determined by a Coomassie® blue stained SDS-PAGE gel.

#### Molecular Weight:

55 kDa. Calculated from the protein sequence and the N-terminal start position.

Certificate of Analysis

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Nichole Reaksecker, QA Manager Date: 08/May/2015

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