**BACKGROUND**

Autosomal dominant Alzheimer's disease is caused by mutations in the gene encoding the β-Amyloid protein precursor (APP). Amyloid β-peptide (Aβ), the major feature of amyloid plaques in Alzheimer’s patients, is the product of APP cleavage by β- and γ-secretases. BACE is the transmembrane protease which cleaves Aβ from APP. BACE and the related protein Asp1 are both widely expressed in human tissue, with the highest levels in the pancreas. BACE is localized within Golgi and endosomes.

**CHROMOSOMAL LOCATION**

Genetic locus: BACE1 (human) mapping to 11q23.3; Bace1 (mouse) mapping to 9 A5.2.

**SOURCE**

BACE (61-3E7) is a mouse monoclonal antibody raised against a C-terminal synthetic BACE peptide of human origin.

**PRODUCT**

Each vial contains 200 µg IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BACE (61-3E7) is available conjugated to agarose (sc-33711 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-33711 HRP), 200 µg/ml, for WB, HQCP and ELISA; to either phycocerythrin (sc-33711 PE), fluorescein (sc-33711 FITC), Alexa Fluor® 488 (sc-33711 AF488), Alexa Fluor® 546 (sc-33711 AF546), Alexa Fluor® 594 (sc-33711 AF594) or Alexa Fluor® 647 (sc-33711 AF647), 200 µg/ml, for WB (RGB), IF, HQCP and FCM; and to either Alexa Fluor® 680 (sc-33711 AF680) or Alexa Fluor® 790 (sc-33711 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

BACE (61-3E7) is recommended for detection of BACE of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500); non cross-reactive with BACE2.

Suitable for use as control antibody for BACE siRNA (h): sc-37224, BACE siRNA (m): sc-37225, BACE shRNA Plasmid (h): sc-37224-SH, BACE shRNA Plasmid (m): sc-37225-SH, BACE shRNA (h) Lentiviral Particles: sc-37224-V and BACE shRNA (m) Lentiviral Particles: sc-37225-V.

Molecular Weight of BACE: 70 kDa.

Positive Controls: BACE (h2): 293 Lysate: sc-170789, MIA PaCa-2 cell lysate: sc-2285 or SH-SY5Y cell lysate: sc-3812.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**DATA**

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.