

BACE2/Asp1 Polyclonal Antibody

CATALOG #:	6102-100
AMOUNT:	100 µg
LOT #:	_____
HOST:	Rabbit
IMMUNOGEN:	Synthetic peptide surrounding amino acid 49 of human BACE2.
SPECIES REACTIVITY:	human, mouse, rat

BACKGROUND:

Accumulation of the amyloid- β ($A\beta$) plaque in the cerebral cortex is a critical event in the pathogenesis of Alzheimer's disease. $A\beta$ peptide is generated by proteolytic cleavage of the β -amyloid protein precursor (APP) at β - and γ -sites by proteases. The long-sought β -secretase was recently identified by several groups independently and designated beta-site APP cleaving enzyme (BACE) and aspartyl protease 2 (Asp2). A BACE homolog was recently cloned and designated as BACE2, Asp1, DRAP (for Down region aspartic protease), and memapsin 1. BACE2 also cleaves APP at β -site and at different site within $A\beta$. BACE2 locates on chromosome 21q22.3, the so-called 'Down critical region', suggesting that BACE2 and $A\beta$ may also contribute to the pathogenesis of Down syndrome.

FORMULATION:

100 µg (0.5 mg/ml) affinity purified rabbit anti-BACE2 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

STORAGE CONDITIONS:

Store at -20°C. For long-term storage, aliquot and freeze at -70°C. Avoid repeated freeze/thaw cycles.

APPLICATION AND USAGE:

Western blot analysis (1-4 µg/ml). However, the optimal conditions should be determined individually. Human heart tissue lysate can be used as a positive control.

SPECIFICITY:

The antibody detects an approximately 70 kDa BACE2 in samples of human, mouse, and rat origins.

FOR RESEARCH USE ONLY! Not to be used in humans.

RELATED PRODUCTS:

Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- HDL/LDL Cholesterol Assay Kit
- Total Cholesterol Quantification Kit

Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

Growth Factors and Cytokines

Monoclonal and Polyclonal Antibodies