



## Product Datasheet

<b>Product Name</b>	Beta-Site APP-Cleaving Enzyme 1 Human Recombinant
<b>Cata No</b>	CB500533
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	ASP2, BACE, HSPC104, Memapsin-2, Aspartyl protease 2, Asp 2, BACE1, Beta-secretase 1, EC 3.4.23.46, Beta-site APP cleaving enzyme 1, Beta-site amyloid precursor protein cleaving enzyme 1, Membrane-associated aspartic protease 2, FLJ90568, KIAA1149.

### Description

Cerebral deposition of amyloid beta peptide is an early and critical feature of Alzheimer's disease. Amyloid beta peptide is generated by proteolytic cleavage of amyloid precursor protein (APP) by two proteases, one of which is the protein encoded by this gene. BACE1 is a member of the peptidase A1 protein family, is a type I integral membrane glycoprotein and aspartic protease that is found mainly in the Golgi. Four transcript variants encoding different isoforms have been described for this gene.

BACE1 is responsible for the proteolytic processing of the amyloid precursor protein (APP). BACE-1 cleaves at the n-terminus of the a-beta peptide sequence, between residues 671 and 672 of APP, leads to the generation and extracellular release of beta-cleaved soluble APP, and a corresponding cell-associated c-terminal fragment which is later released by gamma-secretase

BACE-1 Human Recombinant is expressed in E.

coli containing 366 amino acids 28-393.

The BACE1 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered clear solution.

### Purity

Greater than 95% as determined by SDS-PAGE.

### Formulation

20mM Tris, 20mM KCl, 0.3M NaCl and 10% glycerol, pH 7.8.

### Stability

Store at 4°C if entire vial will be used within 1-2 weeks.

Store, frozen at -20°C for longer periods of time.

**Please prevent freeze-thaw cycles.**

### Applications

Recombinant BACE-1 is an excellent protein for proteases functional assays; highly active, excellent for BACE-1 inhibitor screen assay.