

37-1006: Human BACE1 / ASP2 Recombinant Protein (His Tag)(Discontinued)

Reactivity : Human

Alternative Name : ASP2 Protein, BACE Protein, HSPC104 Protein,

Description

Source : HEK293 Cells

Beta-site APP-cleaving enzyme 1 (BACE1) is an aspartic-acid protease important in the formation of myelin sheaths in peripheral nerve cells. In the brain, This protein is expressed highly in the substantia nigra, locus coeruleus and medulla oblongata. Strong BACE1 expression has also been described in pancreatic tissue. BACE1 has a pivotal role in the pathogenesis of Alzheimer's disease. In Alzheimer's disease patients, BACE1 levels were elevated although mRNA levels were not changed. It has been found that BACE1 gene expression is controlled by a TATA-less promoter. The translational repression as a new mechanism controlling its expression. And the low concentrations of Ca(2+) (microM range) significantly increased the proteolytic activity of BACE1. Furthermore, BACE1 protein is ubiquitinated, and the degradation of BACE1 proteins and amyloid precursor protein processing are regulated by the ubiquitin-proteasome pathway. It has also been identified as the rate limiting enzyme for amyloid-beta-peptide (A β) production.

Product Info

Amount : Human BACE1 / ASP2 Recombinant Protein (His Tag)(Discontinued) / 100 μ g

Purification : > 95 % as determined by SDS-PAGE and SEC-HPLC Analysis.

Content : Formulation Lyophilized from sterile PBS, pH 7.4
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Storage condition : Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Amino Acid : Met1-Thr457

Application Note

Measured by its ability to cleave a fluorogenic peptide substrate, Mca-SEVNLDAEFRK(Dpn)RR-NH₂. The specific activity is >1.5 pmoles/min/ μ g.

Endotoxin :< 1.0 EU per μ g of the protein as determined by the LAL method

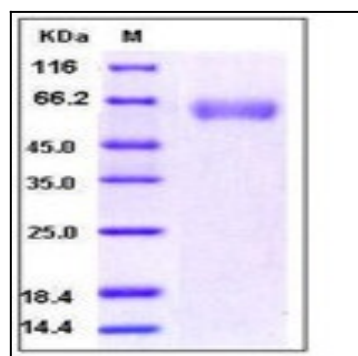


Fig 1: Human BACE1 / ASP2 Recombinant Protein (His Tag)