Human BACE-1 Protein

Cat. No. BAE-HM101

Description

Source	Recombinant Human BACE-1 Protein is expressed from HEK293 with His tag at the C-Terminus.
	It contains Thr22-Thr457.
Accession	NP_036236.1
Molecular Weight	The protein has a predicted MW of 49.5 kDa. Due to glycosylation, the protein migrates to 55-70 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

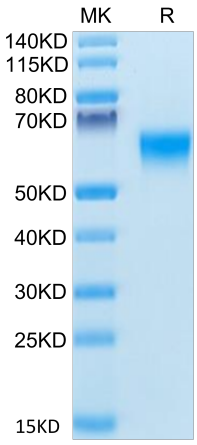
Formulation	Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt.-80°C for 3 months after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

The beta-site amyloid precursor protein cleaving enzyme-1 (BACE-1) initiates the generation of amyloid-β (Aβ), and the amyloid cascade leading to amyloid plaque deposition, neurodegeneration, and dementia in Alzheimer's disease (AD). Clinical failures of anti-Aβ therapies in dementia stages suggest that treatment has to start in the early, asymptomatic disease states.

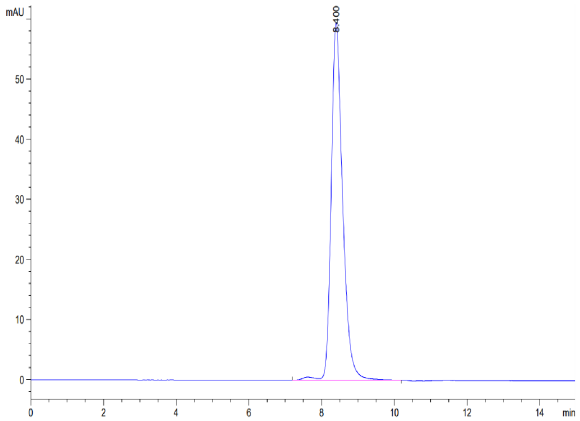
Assay Data

Bis-Tris PAGE



Human BACE-1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human BACE-1 is greater than 95% as determined by SEC-HPLC.

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Bioactivity Data

Measured by its ability to cleave a fluorogenic peptide substrate, Mca-SEVNLDAEFRK(Dpn)RR-NH2. The specific activity is >3.5 pmol/min/μg.