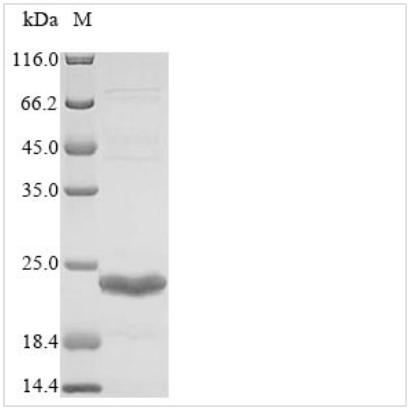
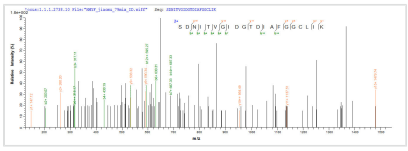
Recombinant Acinetobacter baumannii Beta-lactamase (NDM-1), partial

Product Code	CSB-EP761ABS
Abbreviation	Recombinant Acinetobacter baumannii NDM-1 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	F8UNN7
Product Type	Recombinant Protein
Immunogen Species	Acinetobacter baumannii
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	AANGWVEPATAPNFGPLKVFYPGPGHTSDNITVGIDGTDIAFGGCLIKDSKAKS LGNLG
Source	E.coli
Target Names	NDM-1
Expression Region	164-222aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	22.0kDa
Protein Length	Partial

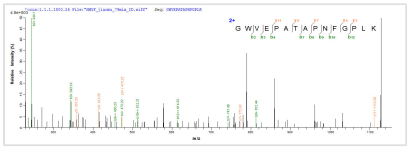
Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-RP076174Ba could indicate that this peptide derived from E.coli-expressed Acinetobacter baumannii ndm-1.



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Description

The DNA coding sequence translated into the Acinetobacter baumannii NDM-1 protein sequence (164-222aa) was fused with the N-terminal 6xHis-SUMO tag sequence to form the recombinant DNA, which was inserted into an expression vector. The reconstructed expression vector was transformed into the E.coli for follow-up expression. The product underwent purification to obtain the recombinant Acinetobacter baumannii NDM-1 protein with N-terminal 6xHis-SUMO tag. The SDS-PAGE analysis determined its purity higher than 90%. After electrophoresis, a 21 kDa protein band was observed on the gel.

NDM-1 is a gene providing instructions for making a protein Beta-lactamase in Acinetobacter baumannii. This gene is a novel metallo-beta-lactamase (MBL) gene carried by some Enterobacteriaceae that induces resistance to most of the antibiotics. This gene was first described in a Swedish patient hospitalized in India with an infection due to Klebsiella pneumoniae. NDM-1 makes bacteria resistant to a broad range of beta-lactam antibiotics, including the antibiotics of the carbapenem family (a mainstay for the treatment of antibiotic-resistant bacterial infections).

Shelf Life

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