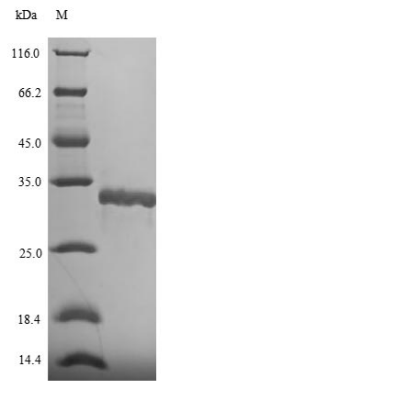
Recombinant Helicobacter pylori DNA protection during starvation protein (dps)

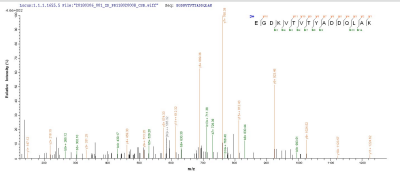
Product Code	CSB-EP337381HUV
Relevance	Protects DNA from oxidative damage by sequestering intracellular Fe2+ ion and storing it in the form of Fe3+ oxyhydroxide mineral. One hydrogen peroxide oxidizes two Fe2+ ions, which prevents hydroxyl radical production by the Fenton reaction (By similarity). Required for the survival in the presence of oxidative stress. Dps is also a virulence factor that activates neutrophils, mast cells and monocytes. It binds to neutrophil-glycosphingolipids and to sulfated carbohydrates on mucin. It might have a role in the accumulation of neutrophils and monocytes at the site of infection. Induces superoxide anion generation, adhesion and chemotaxis of neutrophils, through a pertussis toxin-sensitive pathway involving MAP kinases.
Abbreviation	Recombinant Helicobacter pylori dps protein
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.	P43313
Alias	Bacterioferritin HP-NAP Neutrophil-activating protein A Short name:NAP A
Product Type	Recombinant Protein
Immunogen Species	Helicobacter pylori (strain ATCC 700392 / 26695) (Campylobacter pylori)
Purity	≥ 90% as determined by SDS-PAGE.
Sequence	MKTFEILKHLQADAIVLFMKVHNFHWNVKGTDFFNVHKATEEIYEEFADMFDDL AERIVQLGHHPLVTLSEAIKLTRVKEETKTSFHSKDIFKEILEDYKYLEKEFKELS NTAEKEGDKVTVTYADDQLAKLQKSIWMLQAHLA
Research Area	Microbiology
Source	E.coli
Target Names	dps
Protein Names	Recommended name: DNA protection during starvation protein EC= 1.16.-.- Alternative name(s): Bacterioferritin HP-NAP Neutrophil-activating protein A Short name= NAP A
Expression Region	1-144aa
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	32.9kDa

Protein Length	Full Length

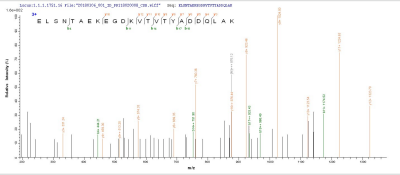
Image



(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-EP337381HUV could indicate that this peptide derived from E.coli-expressed Helicobacter pylori (strain ATCC 700392 / 26695) (Campylobacter pylori) dps.



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Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	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.