9853 Pacific Heights Blvd.
Suite D. San Diego,
CA 92121, USA
Tel: 858-263-4982
Email: info@abeomics.com

32-3946: HP-NAP Recombinant Protein

Alternative Name : DNA protection during starvation protein,Bacterioferritin,HP-NAP,Neutrophil-activating protein A,NAP A,dps,napA.

Description

Source : Escherichia Coli. HP-NAP Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain (Met1-Ala144) containing 154 amino acids including a 10 aa His tag at N-terminus. The total calculated molecular mass is 18.2kDa. HP-NAP 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, thus preventing hydroxyl radical production by the Fenton reaction. HP-NAP is necessary for the survival in the presence of oxidative stress. Dps is also a virulence factor which activates neutrophils, mast cells and monocytes. HP-NAP binds to neutrophil-glycosphingolipids and to sulfated carbohydrates on mucin. HP-NAP might play a part in the accumulation of neutrophils and monocytes at the site of infection. HP-NAP induces superoxide anion generation, adhesion and chemotaxis of neutrophils, via a pertussis toxin-sensitive pathway involving MAP kinases.

Product Info

Amount :	10 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	HP-NAP was filtered (0.4µm) and lyophilized in 20mM Tris buffer and 50mM NaCl, pH 7.5.
Storage condition :	Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.
Amino Acid :	MKHHHHHHASMKTFEILKHL QADAIVLFMK VHNFHWNVKG TDFFNVHKAT EEIYEEFADM FDDLAERIVQ LGHHPLVTLS EAIKLTRVKE ETKTSFHSKD IFKEILEDYK YLEKEFKELS NTAEKEGDKV TVTYADDQLA KLQKSIWMLQ AHLA.

Application Note

It is recommended to add 200µl of deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely. HP-NAP is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.